THE LANCET.

VOL. I.] LONDON, SATURDAY, FEBRUARY 1, 1840. [1839-40.

COURSE OF LECTURES
ON THE
PHYSIOLOGY AND PATHOLOGY OF THE BLOOD,
AND
THE OTHER ANIMAL FLUIDS,

DELIVERED IN THE SESSION OF 1839-40,
AT THE
School of Anatomy adjoining St. George's Hospital,

BY HENRY ANCELL, ESQ., SURGEON.

LECTURE IX.

Blood in different parts of the system: in the capillaries; jugulars; cavæ; spleen; vena portæ; placenta; fœtus.—Arterial, compared with venous blood.—Change of colour considered. Origin of the hematosine—its formation; how the change of colour is produced; uses of hematosine; colour in different animals; modified in physiological states.

GENTLEMEN:—We have hitherto been occupied, almost exclusively, with the consideration of *venous* blood, after its effusion from the bend of the arm; but physiologists are well aware, that blood differs greatly in its nature, as procured from different parts of the system. The most obvious distinction is that between arterial and venous blood; and it has been proved by Le Gallois, Flandrin, Thackrah, and Schultz, that the character of the latter is greatly modified in different veins; it is to these modifications of the qualities of blood, as contained in different parts of the system, that I am anxious in the first place to direct your attention upon the present occasion.

Arterial blood pervades the whole of that part of the double circle of vessels, which extends from the capillaries of the smaller circle, through the left cavities of the heart, to the capillaries of the greater circle, and it remains identical in composition, from its formation in the lungs till it reaches the systemic capillaries of the organs and tissues. At least, there are neither experiments to prove, nor reasons to believe, that it receives any modification in this part of its circuit. In the capillaries of the various structures of the body it undergoes distinct and specific alterations; it furnishes the materials of nutrition and secretion, and its component principles are changed. The result of these changes, in all cases, is the formation of venous blood, and since the materials of the tissues and secretions differ from each other, arterial blood being identical (and it is an axiom, that if from equal things we subtract unequal things the remainders are unequal) the venous blood must differ in every part of the system, and it follows, as a general rule, that the blood contained in each vein is less different from arterial blood, than that of the collective venous blood contained in the trunk nearest the heart.

It is not to be understood by this, that the arterial blood is unsusceptible of variation at different times; it is meant, only, that it maintains its character from the time it leaves the capillaries of the lungs till it reaches those of the various organs. It may vary at different periods of the day, during the progress of digestion, or in consequence of a diminished or increased activity of the organs, and from many other causes. In all these cases a modified venous blood is sent to the lungs, and the state of the arterial blood depends on the more or less complete elaboration of the latter in those organs. The composition of the arterial blood may, and no doubt does, depend, in some measure, upon the composition of mixed chyle, lymph, and venous blood, brought under the vivifying influence of the air; but, as found in the lungs, so it reaches the organs. On the contrary, scarcely two veins will yield at one time a fluid precisely similar. Mr. Thackrah beautifully compares the current of the circulation to the stream of human life, incessantly pursuing its round, and as incessantly changing its elements. The comparison is by no means weakened by the view before us of the varied qualities of the vital fluid.

These facts furnish a strong reason why it would be preferable to adopt the composition of arterial rather than venous blood as a standard of comparison; but there are many obstacles in the way of this, and it has

not yet been done. They also account for the many difficulties which physiologists have always met with in this investigation, and for many of the errors and discordant statements which they have made respecting the blood. Chemists have been very little occupied in the examination of the blood from different vessels, but I will now state the facts which I have been enabled to collect, and which seem to me to be authentic, respecting the qualities of the blood in different parts of the system.

1. *Capillary Blood.*—All that I can collect under this head is negative, and appertains only to the blood of the capillaries on the surface of the body. It is in this part of the vascular system that blood acquires a dark colour, and it cannot be doubted that minute differences exist in it, as procured from different parts of the body, but they have hitherto eluded our means of detection. Capillary blood is of a bright colour, and very viscid, if drawn from the vicinity of large arteries, and of a blackish-red, with a comparatively slight plasticity if procured from the vessels near a large vein; so that it presents the characters of arterial blood, about to be shown, or those of the venous blood, already described, according to the predominance of arteries or veins in the neighbourhood from whence it is taken. Le Canu and Denis find that capillary blood does not differ chemically in any appreciable degree from that of the veins and arteries; but there is a wide field for observation in the microscopico-chemical phenomena of the capillary blood of the various organs of the body.

2. *Jugular Blood compared with Caval Blood.*—Mr. Thackrah made a few experiments upon the blood of dogs to determine this. Coagulation was found almost always to take place sooner in blood from the inferior cava than in that from the jugular vein. When the latter was 1 min. 16 sec. before coagulation commenced, the latter required only 15 sec.; and when the former was 40 sec., the latter was 10 sec. The solid contents were always found in larger proportion in jugular than in caval blood; most frequently more than half as much again; and upon an average the quantity of fibrin in jugular blood was a little in excess, but there were well-marked exceptions to the last-mentioned circumstance.

3. *Blood of the Spleen.*—Haller remarked an indisposition to coagulate in the blood of the spleen, and he has been recently supported very strongly by Autenrieth, who maintains that that blood has peculiar properties. Discordant statements are, however, made by others. Saunders obtained negative results, and Tiedemann and Gmelin found that it coagulated like other blood, and do not believe that it differs. Schultz states that the blood of this viscus is as coagulable as other venous blood, unless a quantity of fluid has just before been taken into the stomach; that it is of a darker tint, and the dark colour is most evident in fasting animals; that neither neutral salts nor the action of the air has the effect of rendering it of a brighter red colour; that its coagulum is less firm than that of other blood; and that it contains less fibrin and albumen, but more fatty matters.

4. *Portal Blood.*—It was formerly maintained by Stenon and Malpighi, that no difference exists between the blood of the vena cava and that of the vena portæ, but of late years the error of this opinion has been demonstrated. Thackrah and Schultz have made the most complete set of observations on this subject, and there is a general agreement in the results. It appears, 1st, That portal blood is darker, and more inclined to brown than to Modena. In Schultz's experiments on that of the horse, it was not reddened by solutions of neutral salts, by oxygen, or by the contact of atmospheric air. The dry crassamentum was grey and brown in colour, that of other veins being deep red, and that of the arteries bright red. Its dried serum was of an ash-grey, the serum of veins and arteries being yellow and yellowish-green. 2ndly, That portal blood contains a smaller proportion of solid matter, and more water than other blood. This is confirmed by Prévost and Dumas. According to Thackrah, it contains a much smaller proportion of albumen, hematosine, and fibrin, than jugular blood. In the blood of the horse Schultz found .74 per cent. *more* fibrin, but in human blood his observations are reported to coincide with Mr. Thakrah's. 3rdly, The portal blood of the horse was found to contain nearly double the quantity of oily matter, a very small proportion of that excess being contained in the serum; but 10.70 per cent. in the dried fibrin, the usual proportion in the fibrin of arterial blood being only 2.34 per cent. This oily matter of portal blood is brown, black, and unctuous, that of other blood being white or yellow-white, and crystalline. 4thly, That portal blood concretes much more rapidly than other venous blood. When blood from the jugular vein of a dog began to concrete in from 1½ to 3 minutes, the portal blood concreted immediately on effusion. It contains a considerably larger proportion of serum, and the clot does not contract so completely as that of blood from other vessels, but remains a soft mass unless artificial means be used. Great variations in this respect are observable, which, according to Mr. Thackrah, may be referred to different states of the constitution. Schultz found that sometimes the portal blood of the horse did not coagulate. 5thly, That, according to Mr. Thackrah, the serum of portal blood, from the retention of colouring matter, is redder than serum carefully separated from the blood of other vessels, and from the same cause it has a higher specific gravity, and

yields on exsiccation a greater weight of solid matter. The serum is, in fact, always red, and on the application of heat it consolidates more quickly, but less completely, than jugular serum, indicative of a modified condition of its albumen.

Portal blood has not the homogeneous appearance and character of other blood. Every circumstance respecting it tends to establish the general fact of defective elaboration. This is precisely what might be expected from the known function of venous absorption in the alimentary canal. Portal blood, according to the above statement, is diluted, but it appears also to be modified by other substances, besides water, absorbed into the venous radicles of this system. It is now well known that saline, colouring, oily, and alcoholic substances are taken up and combined with portal blood, and Mr. Thackrah suggests whether albumen may not be received in an imperfectly formed state. While jugular serum emits the pungent ammoniacal odour on putrefaction, that from the vena portæ has a peculiar animal odour, and we may again remark that coagulation is uniformly imperfect.

According to the microscopical observations of Professor Schultz, the blood corpuscles in portal serum are old, and have lost their contractility, and the colouring matter is soluble in the liquor sanguinis, which is not the case with the blood of other parts of the system. The vesicular membrane is more highly coloured and less contractile. It is considered that the blood moving very slowly in this vein, the cylindrical cavity of its trunk becomes filled with an almost stagnant fluid, and that the old corpuscles subside by their gravity, whilst the lighter ones are carried away, and in this manner a separation takes place of the newly-formed from the old corpuscles, and the old accumulate, this being the origin of the black blood of the vena portæ. Mr. Thackrah's statement, however, that portal blood contains less hematosine than other venous blood, militates rather against these views.

M. Denis calls particular attention to the singular vascular apparatus of the abdomen, which commences in the gastro-intestinal mucous surface, and in the substance of the spleen, and, uniting with other veins, forms the vena portæ, and he has adopted an *hypothesis* respecting its function. These vessels absorb the greater quantity of the fluids taken as drink, and other molecular substances, from the alimentary canal; and M. Denis thinks that they convey particles from the spleen which are formed by that organ. To the fluid combination of these substances, conveyed from the alimentary canal and the spleen to the liver, for elaboration, he gives the name of *spleno-hepatic fluid*. A portion of this fluid furnishes the secretion proper to the liver, constituting the yellow colouring principle, and the resinous substances of the bile, which are only chemical modifications of this principle. The other portion is carried through the liver, with the blood of the vena portæ, and the aqueous fluid, from the alimentary canal, into the general circulation, and serves to repair the loss of the yellow and blue colouring principles of the serum, and of the greater part of the water of the blood. To establish this hypothesis, M. Denis avails himself of the above facts, respecting the qualities of the blood of the vena portæ, believing they concur to prove that the venous blood of the abdomen is mixed in this part of the vascular apparatus with a foreign fluid of a peculiar nature.

5. *The Blood of the Placenta.*—M. Denis analysed the blood of the placenta, collected after a section of the umbilical cord, before its separation, and also the venous blood of the same woman. The former had the odour of the liquor amnii, and a deep reddish-brown colour. The proportions of albumen, saline, and fixed fatty matters were the same in both, but it had a much smaller proportion of water, and a larger proportion of red corpuscles. The latter was 22.62 per cent. in the placental blood, and 14.31 per cent. in the venous blood. M. Le Canu remarks, that this augmented proportion of red corpuscles in the blood destined to nourish the fœtus, is an additional strong proof of their extreme importance in the economy, since the special provision which nature has made, that they may not be defective in the fœtus, seems to indicate that they are indispensable to life.

6. *Fœtal Blood.*—The blood of the fœtus differs also, considerably, from that of the animal after birth. The question first arises, Whether there is any difference between the arterial and venous blood at this period of life? Bichat made numerous dissections of young guinea-pigs while yet in the womb; and, whether taken from the aorta, vena cava, carotid artery, or jugular vein, the blood presented, uniformly, the appearance of the venous blood of the adult. He made the same observation on the blood of dogs, and human fœtuses which died in the womb; the same uniformity existing between arterial and venous blood. Velpeau and Autenrieth confirm this statement, but it has been denied by other physiologists. It has been stated, that on examining carefully the contents of the umbilical vessels, the blood will be found to be florid in the vein, and dark in the arteries, but these observations have always been made upon infants who were born alive, and had breathed, and accordingly they do not invalidate the former. The following are the distinctions which have been pointed out in the character of fœtal blood:—1st, The colouring matter is darker, and it is not so susceptible of the florid hue, on exposure to the atmosphere. Fourcroy denies that this change takes place, except in a very slight degree, giving it a

very veined appearance. Dr. Blundell, in his lectures, published in THE LANCET, states, that on taking blood from the umbilical vessels, and setting it aside in a cup, it becomes of a florid red colour on the surface, but it does not appear whether the blood exposed was from a fœtus which had not respired. Blood from the umbilical vessels, where the child is born alive, is not fœtal blood. 2ndly, Fourcroy, Tiedemann, and others, assert, that the proportion of serum is greater in fœtal than in adult blood. Fourcroy could detect no fibrin in it, and Bichat states, that it contains no phosphoric salts. Denis and Le Canu represent it, on the contrary, as having a small proportion of water, and a large quantity of red corpuscles, and, in the absence of the pulmonary function, as agreeing in composition with the blood of the placenta. 3rdly, Bichat states, that fœtal blood does not coagulate; but this seems to be an error. The clot is soft and diffluent, and Fourcroy imagined that, instead of fibrin, it contained a gelatinous matter. 4thly, Microscopical observers have ascertained that the red corpuscles of fœtal blood vary in size and shape from those of the adult. Instances of their being larger, and of a circular instead of an oval shape, in some of the lower animals, were given in the lecture on the microscopical history of the corpuscles; but Prévost and Dumas assert, that in the human species, they are much smaller in the fœtus than in the adult. Although the character of fœtal blood, and the circumstances which modify it, are by no means well made out, there can be no doubt, that, together with placental blood, it differs considerably from the ordinary blood of adults, and also from the blood of the infant immediately after birth.

7. *Arterial, compared with Venous Blood.*—The character of the arterial blood depends, in the first place, on the qualities of the chyle; of the fluids carried through the liver from the abdominal organs to the right side of the heart; of the lymph, and of the various kinds of venous blood returned to the same reservoir; and, in the next place, upon the due action of the air, and the more or less perfect elaboration of these heterogeneous materials in the lungs. The most obvious, complete, universal, and vitally essential change which the fluids undergo in the animal body, is that which takes place in the lungs. To define this change as simply the conversion of venous into arterial blood, is obviously incorrect. It is the more or less perfect sanguification of all the assimilable materials conveyed to the lungs, to which the action of all the other organs is essentially, or secondarily, complementary. It is the result of the direct action of air upon blood, which cannot be suspended, even for a few minutes, without the sacrifice of life. We shall meet with ample illustrations of the importance of the relations between AIR and BLOOD as we proceed, having, in the present place, to determine the qualities of arterial blood so far as they are known.

I will detail these distinctive qualities, in the first place, briefly, under separate heads; but, from their importance in practical medicine, I shall have to enter much more fully into the consideration of some of them afterwards. 1st, The most obvious distinctive character is that of colour. Arterial blood is of a florid scarlet hue, while venous blood is generally described as of a Modena purple. This difference is most striking in the vessels near the heart, but it is also observable in the minutest capillaries. 2ndly, Prévost, Dumas, Denis, and Le Canu, agree that it contains a larger proportion of red corpuscles. 3rdly, More fibrin is detected in arterial than in venous blood. Berthold found the average proportion in the goat, cat, sheep, and dog, to be as 29 to 24. Müller found .48 per cent. in the arterial blood, and .39 per cent. in the venous blood, of the goat. This agrees with what might have been anticipated, since arterial blood furnishes the material for the nutrition of the body, in which fibrin without doubt plays an important part. The smaller quantity of fibrin in venous blood may be explained by the simple circumstance, that the liquor sanguinis is impoverished in its passage through the capillaries, by the appropriation of its more animalized parts. Emmet, Mayer, and Chevreul, observed a difference in the *quality* of the fibrin of arterial blood—it is yielded in a thicker and more solid form; but Müller considers that this depends on its augmented *quantity* alone. 4thly, There is no appreciable difference in the albumen, the saline, and the fatty matters of the serum. 5thly, Most of the continental authorities, with Davy and Blundell, agree that coagulation commences quicker in arterial blood; but this has been questioned by Richerand, Thackrah, Scudamore, and Majendie, and their experiments throw some doubt upon it as a general rule. There is a much more general agreement that it furnishes a more voluminous and a firmer clot, and separates a smaller proportion of serum, than venous blood. It is found by experiment also to contain less water and more fixed matter, although, according to the majority of chemists, its specific gravity is lower. Dr. Davy makes this 1049 to 1051 for venous blood. According to Le Canu's analysis, when the proportion of clot in the blood of the inferior cava was 106.7, that of the aorta was 122.6 in the 1000; and, according to Prévost and Dumas, when the proportion was 86.1 in the jugular vein of a sheep, that of the carotid artery of the same animal was 93.5. 6thly, The gases combined, and capable of separation by various processes without decomposition of the whole mass, are different.

According to Magnus, whose statement has been given, arterial blood contains more free oxygen in proportion to its free carbonic acid than venous blood; according to Schultz, venous blood gives out carbonic acid gas, and arterial blood oxygen; and Stevens asserts that venous blood gives out carbonic acid, but not one particle can be extricated from arterial blood. 7thly, According to Davy, the capacity of arterial blood for caloric being represented by 839, that of venous blood is 852. The temperature of the former is one to two degrees higher than that of the latter. 8thly, The ultimate analysis of arterial blood furnishes less carbon and more oxygen, amounting to about 5.5 per cent. of each, as shown by the following analysis from Macaire and Marcet:—

	ARTERIAL.	VENOUS.
Carbon	50.2	55.7
Azote	16.2	16.2
Hydrogen	6.6	6.4
Oxygen	26.3	21.7

Although the statements made by different authors respecting the chemical differences and some other details given above, are discordant, the information thus afforded us, as a whole, is of the utmost importance. All the functions of relations in an animal, referrable to a nervous apparatus for their due performance, and in fact all the functions of life are in a state of complete and immediate dependance on the quantity and the quality of the arterial blood. I know that the information we possess respecting the qualities of the blood in different parts of the system is scanty, and too frequently indefinite—little to be wondered at, when we consider the subordinate importance of the blood in the eyes of practitioners, generally, for the last fifty years.

The first consideration which arises out of the above detail of facts, respecting the qualities of the blood in the living system, the most striking, and one of the most interesting of all, is that which relates to *colour*, and more particularly to the change which takes place from the arterial to the venous hue. I propose to devote the remaining part of the present lecture, and part of the next, to the subject of the colour of the blood.

The change from dark to florid takes place in the capillaries of the lungs. It is produced by the direct reciprocal action between air and blood. If this action be in any way prevented, the blood returns from the lungs of a venous colour. Even after the death of an animal, if the action of air upon the blood be maintained by artificial means, the change in the colour of the blood in the lungs takes place as before. Division of the nervus vagus does not prevent it. Blood out of the body is reddened, as we shall see, by mere exposure to the atmosphere; and if oxygen be injected into the veins of an animal, even the venous blood of the living body becomes of a bright red colour.

You are already aware that the colouring principle of blood is hematosine, an animal substance containing a minute portion of iron, and that its seat is the enveloping vesicle of the red corpuscle. With respect to the cause of the colour of blood, it was formerly attributed to the iron, this opinion being founded chiefly on the fact that iron occurs in combination with the colouring matter. Dr. Wells originally urged strong arguments against this notion. There is no necessary connection between redness and iron, and in general metallic colours are much less easily destroyed, and accordingly more permanent than the colour of blood; and metallic colours, when destroyed by alkalies, are restored by acids, and, *vice versa*; whereas the colour of blood once destroyed can rarely if ever be restored. It is well to call to mind on this occasion, that the Newtonian theory of colours has not been universally received. Dr. Wells, who was a disciple of Kepler and Zucchius, believed that the colour of bodies is caused by that portion of light which is received into their internal parts, and reflected back through their surfaces by the opaque particles of their substance, in contradistinction to the generally received hypothesis, that colour depends upon the light which is reflected from their anterior surfaces. I remind you of this, because in everything which relates to the animal economy, and has a bearing, however remote, in questions of life and death, it is prudent never to forget when we are upon hypothetical ground, and because some of our continental brethren have held the opinion of late that the phenomena of the red colour of blood are best explained on Kepler's theory.

A second opinion respecting the cause of the colour of blood which has been long entertained, attributes it to a peculiar combination of animal matter. The strongest argument in favour of iron being the efficient cause is the undoubted fact, that hematosine is the only proximate principle of blood which contains that metal, and this opinion is very generally entertained by physiologists and physicians. Moreover, the recent researches of M. Le Canu, which have established hematosine as a distinct proximate principle, and the opinion that iron exists in it as an element, and not as an oxide, tend in a great measure to reconcile these two views. It has been at all times a difficult matter to get rid of the notion, that the iron has something to do with the colour of the blood.

The cause of the difference between the colour of arterial and venous blood, is another physiological problem which remains unsolved. The red corpuscles having become dark in their passage through the extreme capillaries, acquire, as we have seen, their

bright colour in their transit through the lungs, and they continue to move on in a continuous circuit, exerting their influence on almost every tissue of the body. In each circuit of the blood, which occupies less than three minutes, they undergo two changes of colour, and each of these changes takes place 430 times in 24 hours. In this condition, after the action of the air upon them in the lungs, they exert an unequivocal influence on all the organs of the body, especially on the nervous structures, which influence is essential to life, although there is no evidence that they contribute new matter to the tissues. The change of colour is the index that they are refitted for the performance of these functions. In order to determine the cause of this change of colour, many experiments and observations have been made. When blood is drawn from a vein, and allowed to coagulate, the surface of the clot becomes red, and the central and lower parts black. Boyle first showed, experimentally, that the florid colour is owing to the action of atmospheric air. If the clot be inverted the colours are changed, at least the upper surface takes on the florid redness. Dr. Wells made some interesting experiments on the effects of common air and saline solutions in the conversion of blood; but he had principally in view to establish the doctrine of Kepler. He holds, that air and salts produce this effect by changing the opacity of the fluid, and not by any peculiar action on the colouring matter. After the discovery of the elementary gases by the modern chemists, it was found that venous blood instantly assumes a vermilion colour, and the florid hue of arterial blood is as instantly brightened, in oxygen gas, while they are alike darkened by azote and carbonic acid. Salts, also, were found to redden the blood, and this was attributed to the oxygen which they contain. The explanation of this phenomenon, immediately adopted, was, therefore, that the oxygen combined with the iron; but this has been since disproved by chemical analysis. It has been referred, very generally of late years, to the decarbonization of venous blood, and a slight rise of temperature in arterial; but although both these circumstances take place in the lungs, venous blood is not rendered perceptibly brighter in vacuo, nor by the extrication of carbonic acid otherwise; and even when arterial blood has been artificially impregnated with carbonic acid, and thus darkened, it does not assume a bright colour in a vacuum, but it recovers its natural colour in some degree when exposed to the air, and acquires a bright red colour when agitated with oxygen gas. The change of colour, therefore, does not depend on the exhalation of carbonic acid. Dr. Stevens has thrown a new light on this interesting subject.

Stevens, the late Dr. Turner, Rayer, and others, have observed the following facts:—1. The clot, deprived as much as possible of humidity, is reddened in a much less degree than otherwise, and if washed with distilled water the effect is still slighter. 2. If a clot, which has been thus washed, be moistened with serum, it now becomes red by the action of the air, but in a less degree than the clots which remain untouched. 3. The clot of blood immersed in distilled water does not become red, but darker, and, in fact, blackish. 4 Venous blood, or the dark clots above described, become florid red on immersion in a solution of nitrate of potassa, chloride of sodium, carbonate of soda and other salts, and this experiment succeeds in a vacuum as well as in the open air; when a strong solution is used, the tint is far more florid than that of arterial blood. 5. Salts, sugar, and urea, added to distilled water, in which the dark clot is immersed, redden the latter, and those animal fluids which are most charged with saline matter, possess the same property. 6. Although strong saline solutions produce the effect without the agency of air, the effect of the serum becomes evident only on exposure to the atmosphere, or oxygen gas.

Thus, as originally discovered by Dr. Stevens, the presence of saline matter is a necessary condition for the blood to become scarlet on exposure to the air. The natural colour of hematosine is dark, or blackish, and it is red only when in contact with the serum or liquor sanguinis; the blood is dark in colour when the salts are diminished, and does not acquire the arterial tint on exposure to the air, although it assumes it immediately on salts being added. In respiration, therefore, the oxygen of the atmosphere produces a change in the saline matter of the liquor sanguinis, which is attended by the conversion of hematosine from a dark to a florid hue.

The change of the colour of hematosine is so intimately connected with the question of its formation, that we must not pass the latter subject over in this place. We may consider ourselves in total ignorance as to where the blood corpuscles receive their colouring principle. From the lymph being coloured it has frequently been imagined that the colouring matter is formed in the lymphatic system; and Hewson, observing more especially that the lymph of the spleen resembles diluted port wine, was of opinion that that organ secretes a fluid which, mixed with lymph, gives origin to the red corpuscles. But the red colour of the lymph of the spleen is not constant, and there is reason to believe that the formation of hematosine and corpuscles goes on equally well after the extirpation of that organ. Schultz states that he has traced the primitive formation of blood corpuscles in the lymphatic vessels; that they are at first colourless, but gradually assume a colour before they leave this part of the vascular system. Mr. Lane is per-

fectly convinced that the colour of the lymph is at all times owing to the accidental admixture of blood corpuscles. It has been suggested that hematosine is first formed in the muscles, but the muscular tissue becomes paler in proportion to the loss of blood, and there is no proof, that I am aware of, that it gives origin to this animal principle. From the circumstance of the chyle being white, and the corpuscles in the pulmonary veins almost uniformly coloured, there is a probability that hematosine is formed during respiration, but chyle granules have lately been observed in the blood in the greater circulation, which militates against the reason given. The circumstance that chyle assumes a rosy tint on exposure to the atmosphere, if well-founded, would be strong in favour of the last-mentioned opinion, but Mr. Lane, who has been in the habit of seeing chyle, and on whose accuracy of observation I have the most complete reliance, has observed again and again that no such change takes place. Denis suggests, that the particular action which oxygen exerts on the salts of the liquor sanguinis, results in the formation of hematosine. This is plausible, but it is unsupported by proof. Still, for my own part, looking to the change of colour which blood undergoes during respiration, I must say that I incline to the opinion, that the colouring principle is formed in the lungs.

We know but little of the uses of hematosine in the blood; it exists from the earliest period in the embryo, and continues till death. It appears to be always, nearly, if not quite, identical in composition,—at all ages, and in every period of life. The phenomena which it produces in the economy, must, therefore, be always the same. Nature seems to take great pains to diffuse it in the blood, and, with one exception, it never leaves the vessels except in disease. We see that it does not enter into the system, ready formed, by the chyliferous vessels, or by any known channel; there must be points in the economy where it undergoes decomposition, and where it serves particular uses.

These observations are partly from M. Denis, who proceeds to say, "Its direct action is observable according to the degree of colour of the corpuscles; it kills the organs, stops the secretions, and incurs promptly general death when it circulates with a brown tint. On the contrary, it vivifies the economy, stimulates all the organs, animates, as it were, all the functions, when circulated with its scarlet tint. Thus, muscular power bears a proportion to its quantity—organic vigour—respiratory energy—whence it draws its origin. It is, in a word, a proximate principle, most powerful in the organisation, and there appears to be a correspondence of action between it and the nervous system, of which the mode and direction are unknown, but without which the organisation succumbs."

The use of the hematosine appears to be, to a great extent, that of the corpuscles themselves, which bear a proportion to the respiratory energy. They arrive ready formed in the embryo with the blood of the mother, but they have not a scarlet colour in the arteries or veins, until the respiratory function is established. "In their scarlet state, if accidentally too numerous, they are capable of exciting the system violently, even to the production of inflammation."

We must not pass over the fact, that the corpuscles of the blood are red, principally in the more perfect animals, as in the mammalia, birds, and partly in fishes, but they are not generally so in reptiles and insects. The fluid which is considered to be blood in the medusa-aria is clear and transparent. In the entozoa the blood is also colourless. Some of the annulosæ have red blood, and in this class the rudiments of a respiratory system are met with. The principle blood-vessel in insects contains a transparent fluid, in which corpuscles can be seen. The blood of crustacea is of a bluish-white colour; it resembles the chyle of birds, as does that of the intermediate classes between them and fishes. In fishes and amphibia the vital organs are generally supplied with red blood, while the rest of the body is colourless. In birds, the blood is generally of a more scarlet hue than in quadrupeds, except in aquatic birds, where it is darker. In the skate, the fins have ramifications of scarlet vessels, while the rest of the body is white. These are the received opinions; but although the fact of the muscular parts of fish, being white, has led to the supposition that the blood is colourless, yet, on close examination, it is found to have a distinct although less intense red colour. The muscular fibre is whiter, and the liquor sanguinis contains fewer red corpuscles. The red corpuscles themselves, in the different classes of animals, contain different quantities of colouring matter, and the hematosine, according to Schultz, has different degrees of solubility.

The colour of the blood thus far has, no doubt, appeared to be a subject of speculative rather than of practical interest; but it is really one of those circumstances of which the practitioner avails himself to the greatest extent in etiology, diagnosis, prognosis, and treatment. Crawford seems to have been the first to notice the fact specially, that the usual difference between the colour of arterial and venous blood does not uniformly exist. He observed that in an animal placed in a warm medium, the colour of the latter approaches that of the former. In warm regions the blood is said to be brighter than in temperate ones. Dr. Davy found no perceptible difference of colour in the jugular vein and carotid artery of a sheep during the heat of summer in Malta. When coagulated and still hot, it was less florid in each than the arterial blood of the same animal during winter in

England, and less dark than the venous blood. In early life the blood is brighter coloured than in age; but M. Denis found the proportion of colouring matter less in the young and old than in middle life.

CLASSIFICATION, TREATMENT, AND STATISTICS OF *DISEASES OF THE SPINE.*

To the Editor of THE LANCET.

SIR:—The importance of the subject must be my excuse for again obtruding on your readers my opinions on diseases and distortions of the spine. The more I read the more reason do I find to complain of the want of distinctness both of definition and description on the part of those who have written or lectured on the subject. From this source a thousand practical errors have arisen. Blisters, setons, issues, burnings with moxa, &c., have been continually employed in cases where their use has most assuredly not been indicated. Patients have been allowed to move about who ought to have lain still, and others have been kept for months, nay even for years, supine and motionless, whose cases might have been improved by exercise or a change of position. The great object of my letter is that of calling attention to this point, the importance of which, if it had not long been present to my mind, would have been forced upon me by the following cases on which I have been recently consulted:—

A young lady, in delicate health, was compelled to take a long and rapid journey over the Continent. On her way she began to complain, first of pain, then of much tenderness in the right shoulder; and, upon examination, after she had reached her destination, it was found that she was suffering from a lateral curvature of the spine. A large caustic issue was immediately but unnecessarily made, while the means which alone could have remedied the evil were altogether omitted. On the other hand, a little boy, who had been for some time laid on his back with a disease of the spinal column, attended with slight posterior curvature, was directed by a surgeon of some eminence, residing at a fashionable watering-place, to get up and take exercise, and was especially desired to use the pully and weight, frequently recommended in lateral curvature. The natural consequence has been a great increase of disease and deformity, together with a complete paralysis of the lower extremities.

Before we canvas the advantages of various modes of treatment, we should clearly understand, not only what we are going to treat, but what we propose to effect, or may be capable of effecting. He who professes to *cure*, that is to *make straight*, an angular posterior curvature of the spine, which has been caused by disease, has been attended by caries or absorption of bone, and has terminated in anchylosis, must surely be himself deceived, or seek to be a deceiver of others. He must either not understand, or must wilfully mistake, the nature of the distortion, and the effect which his pressures or extensions are capable of producing. He, again, who proposes to arrest the progress of such deformity by introducing a seton or an issue, is one who is little capable of thinking for himself, and who has formed his opinion and directs his practice through the medium of some confused or indefinite descriptions and directions which he may have heard or read. He who professes to teach should not only have himself a clear notion of his subject, but should possess the power of presenting it clearly and distinctly to the minds of others. Above all things, a clear, accurate, and intelligible classification and definition is of paramount importance; and of the want of that, as regards the subject on which I am treating, there is, I conceive, a very great cause of complaint. The two latest attempts to classify affections of the spine, which have fallen under my notice, are those of Mr. Hale Thomson, as given in THE LANCET, of April 20th and May 25th. My objections to the first of these were stated in my letter of the 11th of May. That division of the subject was simple and intelligible enough, but was deficient, inasmuch as it excluded all those derangements of the form of the column which depend upon irregular action or contraction of the muscles and ligaments. The amended classification, which appeared on the 25th of May, is, perhaps, the converse of this; it may be accurate enough, for aught I know, but it seems to me wofully destitute of the essential qualities of simplicity and intelligibility. After much study and much reflection, I am inclined to adhere to the tripartite division, which I myself proposed, that is to say:—

1st. Affections of the spinal cord and its investing membranes.

2nd. Diseases of the column itself, whether of the bones, fibro-cartilage, or ligaments, preceded or, if not arrested, followed by posterior curvature, and ending in absorption, caries, abscess.

3rd. Lateral or twisted curvature, the effect or the cause of irregular action, but not generally, and not necessarily connected with organic disease.

Under these three general heads we may, I think, easily class the various affections of the spine. The first would include, of course, all those derangements which have their seat in the medulla and its membranes, or the nerves which issue from it; but not those, such as pain, spasm, paralysis, &c.,

which are the effects of the irritation or pressure attending upon disease and distortion of the column. The second and third divisions require a little more explanation, and cannot, indeed, be clearly understood until we obtain a correct idea of the state of things which they are intended to describe; for posterior curvature not unfrequently takes a considerable inclination towards one side, while the lateral is often accompanied by a decided projection backwards. Yet do I know of no expressions which we can substitute for them. The compound epithet of antero-posterior does not mend the matter, and I prefer the greater simplicity of the term I have employed to the higher pretension, but not greater accuracy of the other.

Posterior Curvature may, perhaps, be defined to be a projection backwards of some of the spinous processes of the vertebræ, with a proportional bending forward of the body; it is the effect of disease in the bony or fibro-cartilaginous structure, or sometimes, perhaps, of simple relaxation of the ligaments, and if means be not taken to arrest its progress, it will accelerate and increase that inflammation, absorption, caries, and anchylosis by which it is itself increased and rendered perpetual.

Lateral Curvature, on the other hand, consists of a more general twisting or waving of the spine to one or the other side. The curve is generally twofold, and it then obtains the name of sigmoid, from its resemblance to the letter S. In extreme cases there is frequently, it is true, a projection backwards, which is often confounded with the protuberance of a posterior curvature, but from that it may easily be distinguished. The hunch here is always on one shoulder only, or I should rather say on one side only, for I have under my care two cases, in which the protuberance is low down towards the loin. Then, again, it is never angular in its character, but will be found to form a part of the general twist of the column. These distinctions being borne in mind, the second and third divisions above proposed will be readily understood, and the great confusion will be avoided of the divisions into "curvature with" and "curvature without altered structure"—of "curvature to the right side without disorganization," and "posterior curvature with disorganization," &c. &c. Cases of posterior curvature without disease, or of disease without posterior curvature, are rare, and probably but temporary exceptions, which do not affect the rule. There are important objections to their being put forward as divisions or classes, as it would lead the inexperienced surgeon to draw erroneous conclusions, and to fall into practical error.

The third division includes all cases of twisted spine or of curvature, either to the right or left of the natural perpendicular line of the column, unconnected with disease or disorganisation, but connected always with irregular action or contraction of the muscles, and inducing as it proceeds great distortion of the ribs and displacement of the shoulders. It is true that disease and disorganisation may exist at the same time as a lateral curvature, but that would be an accidental not an incidental occurrence, unworthy of a distinct place in a general classification. In like manner a bunnion and hydrocephalus may co-exist, but they are assuredly not closely or necessarily connected. It is true I have here against me an authority not less respectable than that of Mr. Hale Thomson, who says that "out of 37 cases of diseased spine 11 were lateral curvatures." This is so contrary to my own experience that I know not what to make of it. Out of 137 cases of diseased spine I have never seen one lateral curvature. In a few cases, it is true, where patients have been allowed to sit or move about during the existence of disease and debility, I have known the spine to assume a degree of inclination to one side, but the deformity caused by, or connected with, the diseased bones has always been of the posterior kind. There is, indeed, as much confusion and contradiction in the statements of Mr. Thomson, from one of which I have taken the above quotation, that I can only presume upon some gross typographical error. In The Lancet, of May 25th, page 336, we are told that, out of 300 cases, the deformity or curvature without disease was 263 to 37 of deformity with disease; and Mr. Thomson goes on to say that "the most important and distressing order of distortions to which the human frame is liable, consisted of those which were connected with organic lesion; and the majority of curvatures in these cases were in the antero-posterior direction; 11 only out of the 37 were lateral curvatures." But in The Lancet of April 20th, page 132, we had seen a different statement.

"Of 300 cases which occurred in Mr. Thomson's private practice the following is a correct distribution:—

Cases of curvature to the right side without disorganisation of structure	240
Cases of curvature to the left side without disorganisation of structure	12
Cases of posterior curvature *with* disorganisation	34
Cases of posterior curvature *without* disorganisation	11
Cases of incurvation	3
Total....	300

How are these accounts to be reconciled? In one instance we have the eleven cases given as "*posterior curvatures without disorganisation*," and in the other as "lateral curvatures with disorganisation." It is impossible for us to know which of these ac-

DISCREPANCY IN PRINT

counts is correct, and the statistical statements are therefore rendered valueless. There are many other strange errors or discrepancies in the above quoted paragraphs. In one, for instance, the number of cases of *lateral* deformity out of the 300 is distinctly stated at 252, and the *posterior* at 45; in the other, the *lateral* cases are made to be 263, and the *posterior* only 34.

I am wandering from the object I have in view, which is that of insisting on a more correct classification of spinal affections, yet is there one more statement of Mr. Thomson to which I am impelled to refer, because I think it capable of making a false and unfortunate impression on the public mind. "It is remarkable," he says, "that lateral curvature is very rare among the poor. *In five years I have met with but seven cases*," and these, he adds, were childmaids or maids of all-work. Mr. Thomson must have been little consulted by the poor, and has therefore not had to grapple with spinal distortion in its most terrible forms. *In three years* from the establishment of "The Society, for the treatment at their own homes of poor persons afflicted with disease and distortion of the spine, chest, hips," &c., *I have met amongst the poor with more than fifty cases of lateral curvature*, of which several were males, and of the remainder but very few were childmaids or maids of all-work, amongst which classes Mr. Thomson seems to suppose it exclusively to exist. Many of these cases I have been so fortunate as to treat with success, but some of them have been of so formidable a nature, requiring such unremitting attention, such a variety of methods, and these to be so steadily pursued, that the attempt to treat them at their own homes is almost a hopeless one. Some of these cases have, indeed, gone so far as to preclude the possibility of cure. One of them, especially, was that of a man 26 years of age, and the curvature, with the enlargement of the right shoulder, was enormous, while on the left side the ribs were correspondingly and fearfully depressed. My object in such a case could only be that of affording relief to the distressing symptoms under which he laboured, and that I was enabled to accomplish. When I saw him he was so feeble as to be almost incapable of exertion, and the dyspnœa, owing to the extreme malformation and contraction of the chest, so great, that he could not without difficulty ascend a single flight of stairs. In three months he was able to walk three or four miles, and even to ascend a hill with tolerable ease. Had this case been properly treated in an earlier stage, how much of helplessness and misery would have been spared to the unfortunate patient. These statements, in contradiction to the assertion that lateral curvature is very rare amongst the poor, appear to me to be necessary, inasmuch as they explain the feeling of regret that I expressed in my former letters, that there never should have existed, in this great city, a single institution for the treatment of diseased and distorted spine, &c.

Recurring now to the principal object of my present letter, I would anticipate one or two objections to the classification I have proposed. One of these may be, that I include posterior curvature and diseased spinal column in the same division, seeing that the one does sometimes exist without the other. My reply is, that such cases are exceedingly rare, excepting in the very early stage, before the precursor has had time to produce its usual consequence; one of these rare exceptions occurs to my recollection, which I shall briefly mention. It is that of an extraordinary specimen of anchylosed vertebræ, which was exhibited during the last session to the *Westminster Medical Society*. A young female had been supposed to be consumptive, but got well, and afterwards died of another complaint. On examination it was found that there had been disease between two of the cervical vertebræ, with an abscess discharging into the œsophagus. There was no posterior curvature—there had been no disease of the bones; but the whole of the intervertebral substance had been diseased, destroyed, and removed; the bones, instead of coming together in front only, had fallen into contact in all their parts, and in that manner had become completely anchylosed. If cases so singular as this be made the subjects of classification, we may divide and sub-divide until the memory be more burthened by the collection of rules than by the ungeneralised and isolated facts.

The cases of incurvation of which we hear and read may be held out as the grounds of another objection. I am free to confess that I scarcely understand what is meant by the term, nor do the definitions I have seen at all enlighten me on the subject. Do they mean simply that great increase in the hollow of the loins which I have seen, out unfrequently, is the accompaniment of some peculiar disease or deformity of the patient? If so, I cannot consent to place it at the head of a division or class. I have seen *incurvation* of a much more formidable character in connection with disease and posterior projection. I attended a little girl who had been allowed to get about during the progress of a diseased state of the cervical and upper dorsal vertebræ, and who had the soft and yielding bones beneath the projecting ones, so pressed inwards by the superincumbent weight, that I think there could not be a space of two inches between the bodies of the vertebræ and the sternum. This state of things may be prevented by a proper attention during the existence of disease, and when it exists may be remedied, if

not cured, by the adoption of a fit position, with, perhaps, some degree of extension where it may be safely applied.

The pain and tenderness which sometimes accompany a lateral curvature constitute no valid objection to my division of the subject. They have been mistakenly considered as indicative of organic disease. I conceive them to be merely neuralgic, muscular, ligamentous, the consequences of unequal pressure, extension, or contraction; and they cannot stand in opposition to my principal object, which is, that of simplifying the classification and the treatment of spinal affections, by connecting disease and disorganisation with *posterior*, and disconnecting them from *lateral curvature*. I am, Sir, your obedient servant,

CHARLES VERRAL.

Lowther Arcade, Dec. 21, 1839.

HYDATIDS, TERMINATING FATALLY, BY HÆMORRHAGE

To the Editor of THE LANCET.

SIR:—The following case occurred under my care, as surgeon to the Brighton Lying-in Institution. Its insertion in your valuable publication will much oblige, Sir, your most obedient,

WM. WILTON, Surgeon to the Brighton Lying-in Institution, &c.

10, St. James's-street, Brighton, December, 1839.

Martha Mitchell, æt. 37, having previously had four children, the youngest six years old, and having miscarried once, became a patient of the Lying-in Institution, on the 26th of September, when, as surgeon to the Charity, I was requested to see her. I may here observe, that the menstrual period had been in every respect regular.

She had then been for three or four days suffering from uterine hæmorrhage, accompanied with bearing-down pains. She told me that nine weeks' previously, whilst lifting a heavy tub, she was seized suddenly with severe flooding that lasted for some days; during which time she was attending, I think, the General Dispensary of this town, when considering herself so much improved as not to require further attendance she resumed her employment as charwoman. The symptoms, however, at intervals of a week or so, returned, with more or less violence, and the sensation of bearing-down never quite left her. At these times she contented herself with rest in the recumbent posture; but as this failed, ultimately, to afford benefit, she applied for relief at the Lying-in Institution. She imagined that she had miscarried on the first attack of hæmorrhage, and that *all had not been thrown off*. I could not, upon inquiry, obtain from her friends satisfactory evidence of the miscarriage. Under these circumstances, I directed mineral acids, the neutral salts, and general refrigerants, cooling system of diet, &c.

The symptoms were checked by these means, but on the 3rd of October the hæmorrhage returned, accompanied with slight tenderness over the abdomen. The medicines were repeated, with addition of a few mild doses of blue pill, combined with a sedative.

This plan of treatment was pursued to advantage until the 12th, when the pain became suddenly severe, chiefly over the left iliac region, accompanied with *intense bearing-down*. The left iliac region was occupied by a tumour, in form somewhat resembling the uterus, and extending into the pelvis. The consequent enlargement of the abdomen confirmed in her mind the opinion which she had formerly entertained, viz., that she was pregnant; added to this, she said she experienced considerable fullness and tenderness of the mammæ. From the time that had elapsed (ten weeks) from the first attack of hæmorrhage, and the continuance of the efforts to expel without anything being voided except blood, I felt inclined to think there was more mischief than she herself apprehended, and that the hæmorrhage was the result of some internal disease. An examination per vaginam did not satisfy my mind that she was pregnant, but confirmed the idea that there was some disease of the uterus.

I now requested my friend and colleague, Mr. Simonds, to see her, who agreed with me, both as to the obscurity of the case, and as to the necessity for immediate local blood-letting. We, therefore, directed her to be cupped on the back to ℥xii, and to prevent the general feverish tendency, prescribed salines, &c. The cupping gave relief; but, on the 14th, the pain returned so violently, that the patient could with difficulty be confined to her bed. Our friend, Dr. Lyons, physician-accoucheur to the Institution, being now called in, and having examined her, both generally and locally, stated his concurrence in our opinion, both as to the difficulty of forming a satisfactory diagnosis, and the great probability of the disease being dependant upon the presence of hydatids. This opinion was almost reduced to a certainty by the information we then obtained, that there had been at times sudden gushes of a fluid of a watery character. The action of the aorta being stronger than natural, and there being considerable general tenderness, with pain in the tumour, recourse was again had to local bleeding by ten leeches, followed up by emollient cataplasmata, &c., the neutral salts, with wine of antim., and, at night, blue pill and ext. of opium were directed. The severity of the

pain and other symptoms abated, and the patient appeared to improve, until the 18th, when, the pain returning, with general constitutional derangement, doses of calomel and opium were prescribed, with a repetition of the leeches and cataplasmata.

Through the whole of this period, she had violent forcing pains, with scarcely an interval. On the 19th, finding no diminution of suffering, and the pulse not justifying a repetition of the leeches, Mr. Simonds, in my absence, kindly directed the administration of the acetate of morphia, in considerable doses, with good effect. The continued use of this sedative afforded temporary relief, until the 24th, when the arterial circulation becoming excited, leeches were resorted to.

The sedative system was pursued until the 30th, when, being requested to see her immediately, I found her labouring under severe pain, rather of a *spasmodic* character, though attended by the ordinary *bearing-down*. The pulse was weak, though not sufficiently so to induce alarm. I, therefore, ordered an anti-spasmodic mixture of tinct. of assafœtid. with mixt. of camph. &c. On my second visit, at the expiration of three hours, I found her sinking, as if from extreme exhaustion, which, from the suddenness of its approach and its intensity, could only be considered as the result of some internal hæmorrhage. Brandy and water was now administered, which enabled her to expel large volumes of flatus, in the act of doing which she expired.

Post-Mortem Examination.

Twenty-four hours after decease, I proceeded to inspect the body, in the presence of Dr. Lyons and Mr. Simonds, to the *former* of whom I feel principally indebted for the following description of the appearances that presented themselves to us. The body did not show any remarkable evidence of emaciation. The abdomen being opened, two large coagula, extending from either lumbar region into the iliac fossæ, lay immediately over the intestines. On removing them, and reflecting the viscera inwards, a considerable quantity of fluid blood, about three quarts, was found in this cavity. The intestines were healthy, but in the centre of the superior outlet of the pelvis, towards the left side, was a large rounded tumour, through the superior and posterior portion of which a coagulum protruded from an opening in the peritoneal covering, about a quarter of an inch in diameter. The coagulum being removed, and the parts around the opening being gently pressed, a small cluster of hydatids escaped.

The nature of the case was thus satisfactorily established.

The uterus being removed carefully from its attachments, and examined with reference to its relations, there was observed on the superior and posterior surface of the fundus, immediately beneath the peritoneum, a highly varicose state of the veins, giving it a perfectly mottled and irregularly raised appearance, much thinner at some parts than at others. In this diseased part, but extending rather towards the right, was the opening already referred to. The vagina being laid open, it presented a healthy appearance; the os uteri slightly projecting into it, healthy, but dilated, so as to admit the apex of the index finger, and filled with a reddish mucus, similar to that found in the first stage of labour. The uterus being opened from below upwards, on its anterior face the structure and lining membrane of the inferior and anterior portion were in a healthy state, but from its superior and posterior third a considerable mass of hydatids protruded into the cavity of the viscus, a large quantity of which was easily and immediately detached; but a cluster, equal in size to a small tea-cup, was firmly adherent to the fundus.

On examining this body we discovered that the lining membrane immediately in its vicinity was completely degenerated in character, being covered with irregular patches of lymph, and capable of being easily broken down. The hydatids being partially removed, it was ascertained that the lining membrane was *completely* wanting, and that they were imbedded in the structure of the uterus, the vessels being dissected into layers by them. Towards the fundus they existed in nests of various sizes, thus producing the irregular enlargement of that portion of the organ which has been before described. Towards the superior part of the fundus, between the structure of the uterus and its mucous membrane, was another mass, which separated that membrane from its attachments, and formed a cavity of above two inches in diameter, thus illustrating Andral's observation, that hydatids are frequently generated behind the lining membrane of the uterus. In the neighbourhood of the opening through which the hæmorrhage had flowed, the peritoneal coat was raised up in detached parts from the subjacent parietes by small clusters of hydatids. The left Fallopian tube and ovary were loose and floating. This ovary was enlarged, and on being opened was found distended with hydatids, and the character of its internal structure obliterated. The right Fallopian tube and ovary were tied down by adhesions to the posterior portion of the fundus.

There was no appreciable disease of any other organ.

I subsequently learnt, that for the last six years, since the birth of the youngest child, Martha Mitchell had been subject to inflammation of the bowels (as she termed it), requiring venesection, leeches, &c., &c.; that she was never entirely free from pain in the abdomen, that two years ago she had been ill

for three months, from an attack of inflammation. These facts, coupled with the situation of the hydatids, viz., their being imbedded in the structure of the uterus, lead to the question, how far the hydatids were the consequence or the cause of the diseased state of the uterus, and whence they took their origin. The pathology of the case, and the symptoms that developed themselves during the course of my attendance, induce me to think that in this particular instance the hydatids must have originated in the *centre* of the *substance* of the fundus, and thence insinuated themselves both towards the peritoneal and the mucous coverings of the uterus, and that the bearing-down and general symptoms indicated their existence, when admitted into the cavity of that viscus.

EMPLOYMENT OF THE RECTAL TUBE IN STRANGULATED HERNIA.

To the Editor of THE LANCET.

SIR:—I request your early insertion of the inclosed letter, as it not only conveys a clear idea of the forcible impression made upon the writer by the practice of which he treats, but also evinces the truly kind and generous feelings of British practitioners towards their Irish brethren. I have the honour to be, Sir, your obedient servant,

J. O'BEIRNE, M.D.

North Cumberland-street, Dublin,
January 7, 1840.

"Cullompton, Devonshire, Jan 4, 1840.

"DEAR SIR:—I have recently had under my care a case of strangulated scrotal hernia, in which I adopted, with the most perfect success, the plan recommended by you, introducing a tube per anum, to the extent of sixteen inches or more, for the purpose of giving vent to the flatus contained in the intestines. I trust you will excuse the liberty I have taken in writing to you on the subject, as I am influenced solely by the desire of paying you that respect you are so justly entitled to, and I should not consider myself justified in withholding from you the success I have met with, where the treatment employed emanated entirely from your suggestions. I perfectly agree with you, that 'no medical man can henceforth be considered justified in proceeding to an operation for strangulated intestinal hernia, without having previously given a full and fair trial to the mode of treatment in question.' I may be considered by some, perhaps, rather too sanguine in my expressions, particularly as I have had but one case in which the treatment in question has been put in practice, but really the effect was so immediate (the intestine being almost instantaneously released from its incarceration), that it appeared as though some magic power had worked its influence upon it. I will now proceed to give you the history of the case:—

"On Thursday, the 12th of December, 1839, I was requested to visit John Howe, aged 46 years, a weaver, and a pauper belonging to this parish. I was soon at his bedside, and found him complaining of constipation of the bowels, which had existed for three days previously; constant vomiting; a sense of dragging at the epigastrium, and great pain on pressure of the abdomen; tongue white and coated; pulse 100, but weak. On prosecuting my inquiries, I ascertained that he had been the subject of hernia on the left side for three years, but had never worn a truss; and on the Tuesday evening previous, while at work at his loom, weaving bags (rather a laborious occupation), he felt the intestine protrude to a much greater extent, and with more pain, than it ever had before. Hitherto, he had always reduced it himself by a little manipulation and the recumbent position. There was a portion of intestine, of the size of an orange, in the scrotum, which I could not reduce by repeated and unremitting efforts at the taxis. I bled him to sixty ounces, but with no better success. On the following evening I went to his house with the intention of operating on him, provided the intestine remained unreduced, but suggested to my friend and colleague, Mr. Smith, the propriety of first introducing the tube as recommended by you. I must frankly and candidly admit, I did not consider it would be of any use; however, he concurred with me in opinion, and I proceeded at once to pass the tube of the stomach pump. There was a little difficulty, which was removed by injecting rapidly a little gruel. The tube was introduced twenty-six inches, and after the expiration of about ten minutes, air escaped in small quantities from its mouth; the scrotal tumour gradually diminished, and the poor fellow was soon released from suffering; the sickness ceased; pain was diminished, and the dragging sensation completely relieved. I gave him shortly afterwards, two drops of croton oil, mixed up with sugar, and divided into three powders (one every three hours, and followed up by a little saline mixture), whereby the bowels were most powerfully acted upon; he is now quite recovered, having resumed his usual occupation more than a week since.

"You are at liberty to make what use you please of this letter. I have the honour to be, Dear Sir, yours, most respectfully,

"WM. HAINE MAUNDER."

"To Dr. O'Beirne,
"Surgeon Extraordinary to the Queen,
"Dublin."

TREATMENT OF DISEASE OF THE THUMB-NAIL.

To the Editor of THE LANCET.

SIR:—Although not a medical man, and for that reason ineligible, perhaps, to the honour of corresponding with you on a medical topic, yet, having—at least as I conceive—discovered a specific mode of treating a troublesome disease, I think it right to publish it for the benefit of my fellow-men. Though my contribution is but a mite, yet it is my duty to throw it into the treasury.

There is a disease called, I believe, *onychia maligna*. It most commonly occurs from hurts or injuries, and most frequently in the nails of the thumb, or the great toe. The general appearance is this; the member affected is hard, and tumefied at the extremity, the whole of which is of a pink colour. The nail has left its natural bed, and adheres only at the root, where it stands up at an angle of 45 or 50 degrees from its natural position. The bed which it has forsaken becomes a foul and malignant ulcer, with hard and intractable edges, the surface bound with a dirty clay-coloured slough, which, when removed, shows the bottom, deep, disposed in red granulations, and discharging a very limpid and excessively fœtid humour, which is thrown out in considerable quantity on the least pressure of the member, or on any occasional irritation of the ulcer. These characteristics are invariable, and clearly distinguish the disease, —the pink colour of the swelling, the nail standing up from its root, the clay colour of the ulcer, the limpid clearness and odious fœtor of the water which it discharges, and the great irritability and constant pain. This latter is so considerable as almost totally to prevent sleep; and constitutional disturbance, and even emaciation, are the consequence.

I have had numerous opportunities of seeing this disease among working people in the country, who are the more liable to it from the frequent accidents and injuries with which they meet in their business. I am not quite certain whether or not I have seen it as an original, or, in medical *parlance*, an idiopathic, disease; but I have always seen it resist the endeavours of the surgeons, several of whom I have observed endeavouring to conquer it by applications of greasy plasters, chiefly "Turner's Cerate," assisted by the stimulus of red precipitate, all of which have uniformly failed of producing relief, though prolonged in their application for weeks, or months. By-the-by, as a slight digression, I may say that I have always found that greasy applications seem to nourish and keep alive old sores, which have afterwards yielded to caustic and detergent applications.

Having said what will not succeed in onychia maligna, I have now to say what will, with God's help, effect a cure.

Let as much of the nail as conveniently can, be cut away, with a sharp and strong pair of scissors. Let the whole surface of the sore be freely touched with lunar caustic. This will cause great pain, and a copious discharge of the above-mentioned limpid water. However, let not the caustic be spared. Then let powdered *burnt* alum be sprinkled on it, in considerable quantity, so as to form a thick covering over the sore, and let the whole be enveloped in a cloth containing about a spoonful of magnesia. This latter is, as an absorbent, designed to take up any of the discharge which may ooze out, and which, I believe, has an effect in reproducing the disease. In less than an hour the pain will have entirely subsided, and perfect ease have ensued. Sleep and quiet will now be had. On the next day but one let the sore be uncovered, and the dressing, and any slough which may have formed under it, be gently removed with a pointed quill, or other convenient instrument, which, if to be applied to any other use, I would advise to be carefully washed. Now let the dressing be repeated, just the same form being gone through, excepting that, probably, the caustic need not be so heavily applied. This will, in most cases, be quite sufficient. After the first dressing the good effects will be manifest; the fœtid discharge will be lessened, the pink colour will be diminished, the hardened edges will have come down, and, on the removal of the second dressing, the process of healing will be perceived to have commenced. When the disease has been vanquished, dry lint and magnesia, but no grease.

I never knew but one case which was so inveterate as to require a longer treatment, and this occurred in consequence of my having gone from home for a week or ten days after the first dressing, the parents of the girl, who was the subject of the treatment, neglecting the directions I had given them. They thought, of course, that the cure was to be effected as if by magic, and as so much ease had been obtained, they would not stir an application which had done so much good. In consequence, the fœtid discharge accumulated, and, of course, had its effect on the sore, and on my return home I found the disease so aggravated and inveterate, as to require to be dressed every day for a week, when it at length gave way. This was the worst case I ever knew, and I am sure that had it been treated in the ordinary way it would not have been conquered. The mode of treatment which I recommend I have never, in a multitude of cases, known to fail, and I hope that it may not be thought unworthy of trial, although suggested by a person of such humble pretensions as is your very humble servant,

B. M. Z.

Jan. 20th, 1840.

OPERATION OF LITHOTOMY.

By ABRAHAM DUKE, *Esq.*, *Surgeon to the* WEST-SUSSEX, EAST-HANTS, AND CHICHESTER INFIRMARY.

JOHN CARDY, a farmer's labourer, æt. 67, was admitted into the Chichester Infirmary on the 10th September, 1839. States that nearly four years ago he experienced considerable pain in the loins, attended with difficulty and pain in making water; he continued in that condition up to about fifteen months since, when the usual symptoms indicative of stone in the bladder began to make their appearance. A sound was soon after introduced, but no stone could be felt; he continued in this state (his symptoms becoming more urgent) up to the date of his admission, when on exploring the bladder a calculus was readily detected. At this time the patient's sufferings were extreme, the bladder being very irritable, and the urine loaded with a large quantity of ropy mucus streaked with blood. Says, if he drinks black tea his symptoms become invariably worse, which is not the case with green; has never voided any gravel or sand; is the subject of hydrocele, as well as inguinal hernia; bowels constipated; tongue clean; appetite good; pulse intermittent. Ordered to take the following draught three times a-day, and a tablespoonful of castor oil occasionally; to be kept in bed, and to have half diet:—

Infusion of Pereira bark, ℥iss;
Sesquicarb. of soda, gr. x;
Tinct. of hyoscyamus, ℥ss. Make a draught.

27. Has continued taking the above regularly since he came into the house. The discharge of mucus having nearly subsided, the bladder being much less irritable, and the patient's health improved, the lateral operation was performed to-day, the bistourie cachée being used for the division of the prostate in preference to either the knife or gorget, and "eleven calculi" were extracted; they were of different shapes, varying a little in size, the whole weighing three ounces (apothecaries' weight). The operation was protracted three quarters of an hour, owing to the unusual number of stones; only one could be removed at a time, and after the extraction of the first three or four it was found necessary to introduce a common sound through the wound every time to ascertain the situation of those left behind, before they could be removed by the forceps. During the operation, about a pint of blood, chiefly venous, was lost, but the patient was not much exhausted. No artery of any size was wounded. The patient being placed in bed was ordered the following draught:—

Sedative solut. of opium, 25 drops;
Aromatic spirit of ammonia, ½ drachm;
Camphor mixture, 1½ ounce.

After the patient had been in bed about two hours he complained of a desire to make water, and a sense of tension in the hypogastric region. On examining the wound it was found filled with firm coagula, which, being removed, the urine passed through the opening, and he was immediately relieved; at 5, P.M., had a sharp rigor, which lasted twenty minutes; when this had ceased he took half a pint of arrow-root, after

which he slept for an hour, awoke free from pain, and felt comfortable. At 9, P.M., urine flowed by the wound; no pain complained of; skin moist; pulse 75, soft, and regular; tongue coated, but moist. To have barley-water with mucilage for common drink, and no medicine.

28. Has had a very comfortable night, and slept a good deal; complains of distention of the abdomen, although it feels soft, and pressure can be borne; tongue coated; its edges white and moist; its centre dry and brown; pulse 80, soft, and regular; bowels have not acted since yesterday; urine, mixed with blood, escapes freely through the wound, which looks healthy. An enema of warm water has been administered.

Castor oil, ℥ss. Extra spoon diet.

7, P.M. The bowels not having acted ℥ij of house-mixture were taken about 12 o'clock; there being considerable pain in the abdomen, with tympanitis, and no action of the bowels having taken place, another enema was thrown up, which was soon followed by a copious evacuation that afforded the patient considerable relief, the tongue at the same time assuming a much more healthy appearance; has taken two portions of arrow-root and tea during the day.

29. Has passed a very comfortable night; the abdomen is soft, and slightly tender; pulse 76, soft, and regular; tongue moist, and less coated than yesterday; bowels acted freely during the night; urine flowing through the wound; felt great comfort from the hot bran bags that were applied to the abdomen last evening, and wishes to have them again to-day. At 7, P.M., had a severe pain at the end of the penis. Pulse intermitting (one in every three or four strokes); tongue as in the morning; wound looking rather unhealthy; took a sedative draught, which relieved him of the pain complained of.

30. Has passed rather a restless night; the urine passes freely by the wound, the edges of which are sloughing; bowels not moved since yesterday morning; took ℥iss house-medicine which was immediately rejected; pulse not so intermittent as last evening; feels very weak; extremities rather cold: frequent inclination to vomit; tongue rather brown and dry in the centre, but white at its edge; no distention of the abdomen, and pressure is borne very well. To have a tablespoonful of brandy in water occasionally, and to take the following draught:—

Sesquicarb. of ammonia, 10 grains;
Peppermint water, 1½ ounce;
Tinct. of hyoscyamus, ½ drachm. A draught every third or fourth hour, in effervescence, with lemon juice.

9, P.M. Has had a comfortable "nap;" feels quite easy, and free from sickness; pulse 75, soft and regular; skin rather warm; tongue moist and cleaner; bowels acted once since the morning; sloughs separating.

Oct. 1. Has had a good night; no pain or sickness complained of; pulse as yesterday; tongue whitish and moist; bowels not moved since yesterday; wound cleaning. An enema at once. Continue the remedies.

2. Bowels relieved by the enema yesterday; took some beef tea and a light pudding for his dinner, which he enjoyed very much; has had not had so good a night, having been placed in an uneasy posture; bowels acted this morning after the use of an enema, which he has requested to have administered every morning; in other respects he continues to improve. To have the same dinner as yesterday, and continue his medicine.

3. Felt very easy the whole of yesterday, and took his food with an appetite; passed a comfortable night, and is going on very satisfactorily; complains of slight distention of the bowels. Omit the efferves.cinq. mixture, and take the following draught:—

Carbonate of soda, 10 grains;
Tinct. of hyoscyamus, 20 drops;
Comp. spirit of ammonia, 30 drops;
Peppermint water, 1½ ounce. Thrice a-day. To have fish and a light pudding for his dinner, with a little brandy and water.

4. Was very comfortable the whole of yesterday, except feeling some distention of the abdomen; an enema was given last evening, which produced one evacuation; tongue rather dry and discoloured; pulse 72, and regular; wound looking healthy; granulations rather pale; urine escapes by the wound. To have the same dinner as yesterday, and continue his medicine. 2, P. M., complained of nausea and vomiting; slight pain in the left inguinal region, and distention of the abdomen; did not relish his dinner; pulse very irregular, varying between 74 and 80; tongue coated, dry, and brown in the centre; bowels acted but slightly, although two enemata were administered. Omit alkaline mixture; to take the efferv. mixture as before, with a little brandy and water occasionally.

5. Had rather a restless night; the sickness continued till 12 o'clock; after taking some brandy and water went to sleep, and now (7, A.M.,) feels better again; does not complain of any pain in the abdomen; pulse regular, 84; tongue white and moist; bowels not open; took his breakfast with a better appetite. To have a clyster at once; continue remedies; the same dinner as yesterday.

6. Passed yesterday pretty comfortably; ate his dinner with an appetite; the bowels not having acted took three pills composed of gamboge and calomel last evening; has not had a very quiet night, but has slept at intervals; bowels not moved, although two enemas were administered; pulse rather intermittent, but of good volume; urine still

passes by the wound; abdomen tense; tongue clean, but disposed to be dry.

Sulphate of magnesia, 3 drachms;
Ess. of senna, 2 drachms;
Peppermint water, 1½ ounce. A draught at once. Continue the effervescing mixture.

7. Bowels acted once copiously after taking a meat dinner and the draught, which relieved him very much; had a good night, and feels more comfortable to-day; pulse 80, and regular; appetite good; wound looking healthy; some urine escapes through the urethra. Meat and half pint of porter for dinner; three aperient pills at once; continue remedies.

8. Had rather a restless night; suffered considerably yesterday from the feeling of distention, which did not leave him till eight this morning; did not relish his breakfast so much, and seems very complaining; tongue rather dry and brown in its centre; pulse intermittent; skin soft, and natural; bowels acted twice since last night, and at the present time (10, A.M.,) feels quite comfortable; enjoyed his dinner very much yesterday; wound granulating; thinks he should be much better if his bowels were open. To have 1½ ounces of aperient mixture at once, and afterwards 3 aperient pills; continue former mixture, and meat and porter.

9. Much better to-day; had a good night; bowels acted three times yesterday; appetite good; pulse rather intermittent. Mutton and porter for dinner. Continue medicine.

10. Had another disturbed night, from feeling so much distention, which commenced about 4, P.M., and did not leave him till six this morning; bowels not moved yesterday, and only once this morning, which has afforded him very considerable ease; some urine has passed the natural way for the last few days, and to day as much as four ounces were voided at one time; has a good appetite. To have mutton and ℥ss of brandy in water for dinner instead of porter.

Castor oil, ½ ounce;
Ess. of senna, 1 drachm;
Mucilage of gum, ½ drachm;
Peppermint water, 1½ ounce. A draught at night and morning. Continue other remedies.

11. Feels quite comfortable; took a draught yesterday at 2, P.M., which produced two copious motions; tongue clean; pulse regular; passes the greater part of his urine the natural way. Meat and porter for dinner. Continue medicine.

12. Going on well. Continue medicine, &c., as before.

13. Same as yesterday; very little urine escapes by the wound. Continue medicine, &c.

14, P.M. Slept very well till about 2 o'clock, when he was seized with pains in his bowels, accompanied with vomiting and purging; has continued in this state up to the present time; took his dinner, but not with an appetite; pulse intermittent; tongue clean; countenance rather anxious; some of the urine still passes by the wound. Omit effervescing mixture.

Tincture of opium, 1½ drachms;
Compound tincture of cinnamon, 1 ounce;
Peppermint water, 8 ounces. Two spoonfuls to be taken after each fluid dejection. A spoonful of brandy and water occasionally.

16. Has not had a good night; still complains of slight sickness and purgation; tongue rather dry and brownish in the centre; appetite not so good; pulse 70, and regular. Omit opium mixture.

Saline effervescing mixture, 2 ounces;
Sed. solution of opium, 4 drops. To be taken whenever the nausea is urgent. Meat and brandy as before.

17. Slept well; about 3 o'clock the bowels were copiously moved; tongue rather coated, but moist; some urine still passes through the wound, when he makes water; pulse intermittent; says the effervescing draught makes him feel uncomfortable. Omit effervescing mixture.

Sed. solut. of opium, 4 drops;
Comp. spirit of ammonia, 20 drops;
Peppermint water, 1½ ounce. A draught to be taken if necessary. Meat and brandy (℥jss) in water for his dinner.

19. Slept well; bowels moved last evening, and again this morning; has taken the draught three times in the course of the day; tongue clean; appetite good; pulse soft, and regular; wound healing; took a pint of porter, a small meat pudding, and some rice milk for his dinner yesterday. To have mutton, with the same quantity of porter for his dinner to-day.

21. Bowels very much purged, but attended with no pain; scarcely any water flows through the wound; had a pretty good night; pulse soft, and regular; appetite good; tongue clean. Omit opium draught.

Comp. powder of chalk and opium, 3 drachms;
Comp. trag. powder, 1 drachm;
Sesquicar. of soda, 1½ drachms;
Peppermint water, 7½ ounces. Two spoonsful after every fluid dejection. Boiled mutton, rice, and brandy and water for dinner instead of porter.

22. Had a comfortable night; bowels still rather purged; tongue clean; takes his food with a relish; wound nearly healed. Continue absorb. mixture. To have rice milk and ℥jss brandy in water, and no meat.

24. Complains of sickness; bowels moved four times since last night; tongue clean; scarcely a drop of urine flows through the wound, and that only when he makes water; can hold his water for two hours and more together; slept pretty well; is disturbed at intervals by a feeling of nausea, which it relieved by taking a small quantity of

brandy; pulse soft, and regular. Continue absorbent mixture. To have meat and a little pudding for dinner.

25. Doing well. Continue medicine, &c.

26. Going on well; walked out of doors for half an hour; all the urine passes the natural way, and he has full power over his bladder now. Continue absorbent mixture, and to have the same diet as yesterday.

27. Has quite recovered, with the exception of feeling slight nausea occasionally, and a tendency to relaxation of the bowels, which he attributes entirely to his long confinement to the ward; has a very good appetite; took another airing to-day, and says he feels himself strong enough to walk three or four miles; the wound has nearly closed, very little more than the skin having now to heal, but from having so great a desire to leave his bed and walk out (being so unused to confinement) what now remains of the wound, is, of course, in some measure, prevented from uniting so readily as it would do were he to remain quiet. Continue absorbent mixture, and diet the same as yesterday. To have his discharge in a few days.

He will not consent to have his hydrocele cured.

THE LANCET.

London, Saturday, February 1, 1840.

"A Member of the Council" of the London College of Surgeons, who conceals his name, either from modesty or shame, has "offered a few observations" on Mr. Key's Letter; which he singularly enough says that he only read on the day before the 16th of January, 1840. The letter is *de omnibus rebus et quibusdam aliis;* and it would be equally vain and unprofitable to search, in that hasty lucubration, for any other general aim than the vague ambiguous expression of a desire, on the part of the convicted corporators, to retain irresponsible power. The anonymous member of the Council observes, in the first place, that but few persons, whether friends or foes, are likely in these times to consider any institution whatever so perfect as to defy improvement; and he professes his ignorance of what is really meant by the term, "the extraordinary position" in which the College is placed. The ignorance of the member of the Council is excusable. His insensibility in the present "extraordinary position" which he occupies with his colleagues is very common in the circumstances. He will recollect that the great Scotch poet once saw a certain "ugly creepin" insect careering on a lady's bonnet—a very "extraordinary position"—at church, and that he addressed to the crawling pilgrim some verses, concluding with a moral, or a prayer, in which the professed ignorances of the College Council would do well to join:

"O wad some power the giftie gie us,
"*To see ourscls as others see us!*"

The sight, if not gratifying, might be edifying. What *can* be more "extraordinary" than the position which the *Council* of *twenty-one* now occupy; setting at defiance the rights of 14,000 members, trampling upon their interests, expending their money, upholding monopolies, and emitting ideas of the past ages of barbarous surgery, when shaving, bone-setting, and bloody operations constituted a mean art, neither consecrated, animated, nor directed by medical science. Is surgery a mere handicraft now? Is it to be divorced from physic by the antiquated prejudices of superannuated imbecility?

"There is a method in man's wickedness; it grows up by degrees;" but the Council of the College of Surgeons has exhibited a rapidity of growth, a luxuriance of iniquity, a maturity of evil, which leave it unparalleled in the history of self-elected corporations. Its secret proceedings, oppression of teachers, selfish by-laws, insensibility to the public good, insolent disregard of its members, place it, indeed, in an "extraordinary position;" the more singular, as it is occupied in this country, and in the nineteenth century.

Mr. Key alluded to two influential members. They might have informed him, says the anonymous member, "that *the College* "*was by no means supinely waiting for events,* "but was anxiously engaged for a long pe-"riod in attempts to effect the very object "noticed by Mr. Key." This is informa-

tion. The members of the College were kept in profound ignorance of the intestine movement. They were uninterested, and were not consulted—the "cyphers if not aliens"—yet "the mode of electing to the "Council was under consideration at the "very date of his letter."

The next long sentence of the learned member's letter is neither grammatical nor intelligible; the conclusion of the paragraph is hypocritical and fallacious—"No "member of the College can have any legi- "timate reason to complain of its conduct "and its progress, seeing that every candi- "date for the diploma comes voluntarily, "and without any legal compulsion or neces- "sity, to undergo his examination, to enrol "himself in the list of its members, and to "take a *solemn obligation* that he will there- "after *act honourably*, and do all in his power "to maintain the *dignity and welfare of the* "*College*. How some of its members may "be able to reconcile this obligation with "their subsequent conduct towards *the Col-* "*lege*, must be left to their own consciences, "and the views they may take of this *oath*."

What, we should like to know, is *the College?* Are the self-elected 21 *the College?* Are the *fourteen thousand not members* of the Royal College of Surgeons in London? Did not each of the 14,000 members pay the same sum and take the same oaths as the self-elected members of the usurping Council? In uniting the members of the medical profession into One Faculty—in giving the *members of the college* a voice in the election of the Council—in rendering the Council responsible for their conduct—in making their acts public—in saving them from execration, and their memories from infamy—will not the members of the College be acting honourably, and in strict conformity, with the solemn obligation "to maintain the *dignity and welfare* of the *College*." But by what strange perversion of ideas, and solecism in language, does the infatuated "member of the Council" consider himself and his twenty colleagues to be *the College*—where they were never elected by the members, nor have any moral or tangible right to consider themselves, in any sense, its legitimate representatives?

The plans agitated in the Council of twenty-one—*not* The College be it remembered—would be amusing, if they did not lay bare so many deplorable modifications of selfishness, seeking to evade the simple, straightforward course of justice and reform:—

"In the opinion, however, of many well-informed and unprejudiced men, who give themselves time to reflect upon the position of the College, and its want of legal or parliamentary powers, it has already done much, and much more than might have been expected, to raise the character of surgeons and of surgery in the public estimation; and that no member of the College can have any legitimate reason to complain of its conduct and its progress, seeing that every candidate for the diploma comes voluntarily, and without any legal compulsion or necessity, to undergo his examination, to enrol himself in the list of its members, and to take a solemn obligation that he will thereafter act honourably and do all in his power to maintain the dignity and welfare of the College. How some of its members may be able to reconcile this obligation with their subsequent conduct towards the College, must be left by their own consciences, and the views they may take of this oath.

"With respect to Mr. Key's observations on the mode of electing to the Council, it is not possible to conceive, nor do I mean to imply such a suspicion, that he can have heard that the subject was long ago mooted, and moved, and discussed, and was again under consideration at the very date of his letter; but on so great a change in the constitution of any public body there must be a great variety of opinions. I have grounds for stating that one leading member of the Committee in the House of Commons, on Medical Education, who is considered as a great authority on all such subjects, is, or was, of opinion that the present mode of election to the Council cannot be improved. Some are of opinion that in a College of Surgeons none but surgeons can have any claim to vote for members of the Council; that no member of another body, to which he owes or has sworn allegiance, ought to have a vote; most people seem to think that there could be no possibility of opening it to all the members of the College, who number, perhaps, 14,000, or more; the greater part of whom are licentiates of the Society of Apothecaries; and that there could be no check on written or proxy votes, but that, whatever plan might be suggested, the votes must of necessity be given personally at the College, and by members of the College,

practising only as surgeons. Some think it might be open to all who have been ten years in the profession, and who have practised surgery exclusively for at least three years preceding the election; and some think that the privilege of voting might be properly confided and confined to all surgeons of hospitals and all teachers in anatomical schools throughout the kingdom, as well as all others who choose to undergo the second examination after twenty-five years of age.

"Amidst all these discrepancies of opinion, it is evident that time is required to amalgamate and to reconcile them to one distinct and definite plan.

"I state these circumstances in order that hereafter, if a change be proposed or effected, the profession may give the credit or the discredit to the College, and not suppose that they have been urged to its adoption by the strictures of Mr. Key, or of any one else."

The last paragraph betrays an anxiety for the credit of the Council (miscalled the College); but this is natural, for it is a commodity of which no body has less to spare.

Five paragraphs beginning with "As to" and "With respect to" require little remark. The Member of the Council is evidently an old-fashioned fellow, and as his paragraphs are drawn from cast-off letter-writers his ideas are of the past age. He is not aware that he is living in the age of railways and the penny post; he still dreams of wagons eight days on the way to London, and while he admits that PARK, HEY, WHITE, and DALRYMPLE would have been no disgrace to the Council of the College, he cannot "conceive or conjecture how those "gentlemen, residing respectively in Liver-"pool, in Leeds, in Manchester, and in Nor-"wich, could, *by any possibility*, have attend-"ed to the duties of the College of Surgeons "in London." This narrow-minded Council appears always to have maintained its monopoly, on the ground that it was to be constituted of surgeons *resident in London*. The notion was always preposterous, and it is now ten times more preposterous than ever. The constituents of the National Faculty of Medicine will reside in all parts of the kingdom, and every physician, surgeon, and practitioner of merit, or eminence, will be eligible to office in the Council, and may attain to the highest rank and honours in the profession. The locality of London will confer no unfair privileges, and the able men living more than seven miles from St. Paul's will be laid under no bar of exclusion.

We cannot overlook the following paragraph, nor can we tender our thanks for the oblique compliment which the cunning old councillor pays to "the Editor of a certain journal."

"As to a supposed objection lest the editor of a certain journal might be elected, I dare say he would have made a very good member of Council, and probably would have been one of the most strenuous opposers of any change, when he had seen how well and how honestly and honourably the business of the College is conducted under its present forms; and I think that Mr. Key would be very likely to see things in the same light if he were now in the Council (and in which I hope I may live to see him), for we are not without instances of the kind."

[This is a measuring of other men's morality by the apostate LAWRANCE's bushel of dishonesty.]

The editor of no liberal journal could accept office in a corrupt, self-elective Council, nor do we see that any surgeon, in the possession of his intellect, of an average degree of conscientiousness, of common honesty, of the slightest regard for the interests of the profession to which he belongs, could accept a seat in a Council laden with iniquity and encumbent with apostacy. When a Cacique of Cuba was condemned to be burnt alive because he had not given the Spaniards enough gold, he was handed over, before the pile was lighted, to a Franciscan friar, who exhorted him to die a Christian, and promised him the felicity of Heaven. HATACHU simply asked, "Will the Spaniards go to Heaven?"—"Yes, certainly," replied the friar.—"Ah, then, if it be so," said the prince, "let me not go to Heaven!" It is not irreverant to mention the Heaven of an inquisitor in connection with the College of Surgeons, though the other place would be more in harmony with the Council. There

are some members who linger in the Council of the College of Surgeons, and lend to it the sanction of their character, in the hope, perhaps, to see its constitution placed upon an equitable footing. They would not willingly sacrifice the respect of their brethren, nor tamper with their fame. This is the time to declare themselves. The eyes of the profession are upon them; they are not of the herd, and the error will be their own if they continue to be confounded with those evil doers that cling selfishly to abuses, and are not placed at the head of the most illustrious, because the most efficient, and disinterested reformers.

MEDICAL REFORM.

NORTH OF ENGLAND MEDICAL ASSOCIATION.

The first meeting of this important Association, which now includes nearly one hundred and fifty members, was held on Tuesday, the 21st of January, at Newcastle-upon-Tyne. The Report of the Committee was read, and a petition agreed upon to be presented to both Houses of Parliament. We shall publish next week some account of the proceedings of the meeting.

AT ST. GEORGE'S HOSPITAL,

The retirement of Sir Benjamin Brodie has been followed by the election of Mr. Walker, late Assistant Surgeon, to the office of Surgeon of the Hospital, and the promotion—not to say the election—of Mr. Tatum, a near relative of Sir Benjamin, to the Assistant Surgeonship. The latter circumstance has elicited a letter to the Governors from Mr. Lane, who states that although he "educated himself principally with the view" of one day "becoming attached to the surgical department of their valuable Institution," and has "throughout his professional life" been particularly ambitious of this object, yet that, after a long series of "harassing proceedings to which he has been subjected" by Sir Benj. Brodie and a clique of the medical officers, he has discovered the folly of seeking his own advancement on the score of competency, seniority, and prior claims, in opposition to those of "young men who are induced to trust for their advancement rather to the favour of individuals who are *in power, than to their own talent and industry.*" Mr. Lane has, therefore, declined a contest in which the chief feature of his own failure and the success of Sir Benjamin's relation, would be, he intimates, a great deal of "unnecessary trouble and expense."

"Trouble and Expense" are strange elements in elections, where talent and industry alone should contest the prize, because it is *science* that has to be served by the victor, and that with the noble, not the ignoble means. Mr. Lane would have had a yet stronger case to lay before the Governors—or, rather, the public—for of the Governors, as judges in such a matter, a very queer account is given by a well-informed correspondent in another page of our Journal this week—had he boldly demanded the Mental Trial for the vacant office! The Concours would infallibly have laid the least qualified man on his back.

Memoirs of the Life of Sir Humphry Davy, Bart. By his Brother, John Davy, M.D. Vol. I. Smith and Co., London. 1839. 8vo. pp. 475.

This work furnishes an interesting account of the life and labours of one of our most distinguished natural philosophers. Sir Humphry Davy was a man of genius in the truest acceptation of the term, and there are few philosophers who have laboured with such zeal, industry, and success, for the advancement of science. With regard to celebrated men, everything connected with them, as Dr. Davy remarks, acquires interest; we, therefore, present to our readers the following particulars of Sir H. Davy's personal appearance and character:—

He was of middle stature, about five feet seven inches high, but appeared shorter, perhaps, from the just proportions and symmetry of his make. His hands and feet were small, and his bones in general small; but his muscles were comparatively large, especially of the lower extremities, in consequence of which he was well adapted for those exercises and sports of the field and river in which he delighted. He could walk well, and bear fatigue for a long time; his arms and shoulders were, he used to say, less able than his legs; yet their strength was perfectly adequate to the management of the salmon rod, and the laborious amusement of salmon fishing; and there were few anglers who could throw the fly further on the water, or with greater steadiness and delicate precision; and he was quick in the use of his gun, and amongst good shots a very tolerable one, especially in that kind of shooting which requires an active hand and eye, as snipe shooting. His chest was well formed and rather ample, and his breathing

perfectly good, and he was a good swimmer. His neck was rather long and slender; his head was rather small, its surface smooth and rounded, without any striking protuberances; the occipital part was small, the forehead ample and elevated, and very beautifully rising, wide, and gently arched; his face was oval, and rather small, but, owing to the expansion of forehead, not apparently so; his features were not perfectly regular. The nose aquiline, and broad at its base; the mouth rather large, the under lip prominent and full; the teeth not large, but irregular; his eyes were light hazle, and well formed; his hair and eyebrows were also light brown; the latter were scanty, the former abundant, and very fine and glossy, with a tendency to curl; his countenance was very expressive, and responsive to the feelings of his mind; his voice was full-toned and melodious, with something in it which impressed his hearers, and made it remembered. It was particularly well adapted to express feeling, that kind which was predominant in him,—the high and poetical,—and equally well adapted to convey tenderness and kindness.

His temperament was what is commonly called the sanguine. In his pursuits he was ardent and zealously persevering, stimulated by difficulties to exertion, and delighting to exercise the power he was conscious he possessed of overcoming difficulties, and as much in the ordinary affairs of life, and in shooting or fishing, as in matters of the greatest moment and of a scientific nature. The spring and elasticity of his mind were extraordinary. No misfortune could depress it long when he was in health, or, indeed, when suffering under disease. He considered yielding, weakness, and always resisted it, either by an effort of mind, or by change of pursuit or scene. This firmness of purpose and exertion was very remarkably shown during his long illness. He always strove and attempted to make head against it, trying various remedies, consulting successively different physicians, using different kinds of diet, shifting his abode from the north to the south, according to the seasons and his sensations.

He was warm and disinterested in his friendships, and delighted in cultivating them. Fashion did not attract him, nor rank, nor even genius and knowledge, so much as goodness of heart, and simplicity of mind, and steady worth of character. His oldest and dearest friends were thus distinguished:—"Nisi in bonis amicitiam esse non posse," was the sentiment of his early youth, as expressed in a fragment of an essay on friendship, given in the commencement of the work, and sure I am that it was experienced through life.

In disposition he was eminently social and cheerful, when in health delighting in society, and always well received, from his powers of pleasing, and amusing, and instructing, under the guise of agreeable conversation.

He was kind and courteous in the intercourse of life, and that naturally from a disposition to promote the happiness of others, rather than from artificial breeding, and the observance of the mere rules of polished society, though these he could not but respect.

He was convivial in his habits, and curious in the qualities of meats and wines, yet in the latter he was temperate. He preferred the lighter kinds, the French, and very rarely indeed committed any excess in their use.

In dress he was rather careless, especially latterly, consulting more health and comfort than fashion and appearance.

As a labourer in the course of science Sir H. Davy was indefatigable. When twenty-two years of age he published his "Researches," a work so laborious that it might have sufficed for the life of an ordinary man. In the year 1801 he took up his abode in London, and became connected with the Royal Institution, where he remained for eleven years. During this period he published an account of his investigations in tanning and agricultural chemistry; but his labours in electro-chemical science were the most important of all. In October, 1806, he made the splendid discovery of the bases of the fixed alkalies, and soon afterwards completed his researches on muriatic acid gas. In August, 1815, his attention was first particularly directed to the subject of fire-damp, and his lamp was perfected in December of the same year. From 1823 to 1826 he seems to have been chiefly occupied in endeavouring to discover a means of preserving the copper-sheathing of ships. On this subject he published four memoirs, but his method was soon abandoned. This was amongst the last of his scientific discoveries, for he was then obliged to travel on account of a lingering illness which terminated his life on the 29th of May, 1829. The last days of the philosopher are touchingly described by his affectionate brother.

We omitted to state in The Lancet of last week, in inserting the correspondence between Mr. Mayo and Mr. Wakley, that it was extracted verbatim from the columns of the "Medical Gazette," to which journal it had been forward by Mr. Mayo.

WESTMINSTER MEDICAL SOCIETY.

Saturday, January 25th, 1840.

Mr. STREETER, President.

DISEASE OF THE SCHNEIDERIAN MEMBRANE, SPREADING TO THE BRAIN.

Mr. JOHNSON related the case of an elderly female who had been the subject of purulent discharge from the left nostril, accompanied by tumefaction. There was no pain, but a little redness was observed on inspecting the inside of the nostril. Under the external use of leeches, the internal application of astringent lotions, and the administration of sarsaparilla, she got a good deal better, and went into the country. She returned, however, about three months ago, much worse; the tumefaction was greater, and the discharge had increased in quantity; she appeared very ill; no disease could be discovered, but she continued getting worse. Three weeks before she died, the nose not being worse, she was seized with delirium, and a day or two before death she became affected with coma, accompanied with pyrexia. It was suspected that there was disease of the nasal bones which had spread to the brain. After death it was ascertained that the membranes of the brain and the brain itself were highly injected; the ventricles contained serum, with flakes of lymph and pus; the corpus striatum of the left ventricle was ulcerated by an opening communicating with an abscess in the anterior lobe of the left hemisphere; the left olfactory groove contained a quantity of pus. On breaking up the ethmoid bone its cells were found full of pus, and the structure of the bone was much diseased; the left olfactory bulb contained an abscess, and was much enlarged; suppuration had travelled back to the origin of the nerve, and formed a communication with the abscess in the anterior lobe. He (Mr. J.) considered that the disease had commenced in the Schneiderian membrane; the dura mater and arachnoid were healthy, where they were reflected over the ethmoid bone.

Mr. STREETER remarked that the case related bore a strong analogy to that disease which commenced in the ear, and extended thence to the brain. Was the smelling injured or destroyed in this case? There was a case in Mr. Howship's collection in which the smell was vitiated.

Mr. JOHNSON replied, that in the instance he had related, the smell was lost, not vitiated. The case was curious from the fact of the disease having travelled along the nerve. When the ear was the seat of disease the brain became implicated from contact with the diseased bone.

Mr. ALCOCK related a case of ramollissement, accompanied with fits, in which the patient was annoyed by a disagreeable smell. The case was curious from the olfactory nerves being entirely free from disease.

THE DISCUSSION ON ABORTION, RESUMED.

Dr. REED remarked, that diseases of the fœtus and ovum frequently caused abortion. He had met with one case, in which it arose from intra-uterine disease of the fœtus, in a lady who had miscarried several times, and always before the seventh month. He advised her at the sixth month to remain constantly in the horizontal position, by which the uterus was kept quiet, and all symptoms of miscarriage prevented. She remained well until the expiration of eight and a half months, when symptoms of uterine action coming on, labour was induced; the child was alive, but died in two days. On examination of the child, it was found to have died from inflammation of the mucous membrane of the bowels, which had evidently existed much longer than two days. Abortions depending on the mother most commonly arose from plethora, though occasionally they might have their origin in debility. When arising from plethora, frequent bleedings was an advisable and successful mode of practice, as a preventive means. He agreed with the author of the paper, that ergot was the most efficacious of all remedies, and if administered sufficiently early dangerous hæmorrhage would never occur. With reference to the value of opium, he considered it of great use in cases of threatened abortion from irritation. He was disinclined to meddle much in removing clots, as he thought their presence acted as a check upon further hæmorrhage. He preferred the use of the plug, which he considered was more useful in abortion than after delivery at the full period. Cases had occurred, in which a twin fœtus had been aborted, while the other had remained to the full period of utero gestation; he did not know whether the placentæ were united or separate in these cases. With regard to the preventive treatment, by far the most important, absolute rest when the usual time of aborting draws near, the avoidance of stimulants, and all sexual intercourse, were the most prominent indications.

Mr. BLOXAM considered that opium, used daily, was very useful as a prophylactic in many cases. It was also of service after profuse hæmorrhage, given in full doses with stimulants, to remove the exhaustion.

Mr. VERRAL thought opium objectionable only from the secondary collapse which it induced. He had seen the first symptoms of abortion removed by opium, in a patient who had never gone her full time.

Dr. CHOWNE considered, that diseases of the fœtus and ovum were not so commonly the causes of abortion as many authors supposed. The evidence on which that opinion

had been founded, was the fact of the ovum being frequently found diseased. Might not this diseased state be often the result of a protracted process of abortion? Treatment must vary much with the period at which the abortion occurred. Unless the uterus was so small and so little dilatable that a large collection of blood could not take place in it, mechanical obstruction would be highly improper. He believed a bandage round the abdomen would not prevent the distension of the uterus with blood, unless it were so tight that it would injure some of the other viscera. Opium was very valuable from its power of sustaining the energy of the nervous system.

Mr. STREETER, in reply, said, that his interdiction of the use of opium, referred only to those cases in which the os uteri was dilated, and the ovum not yet expelled. It was useful before the pain and hæmorrhage, the essential symptoms, had set in. It was only in cases of early abortion that he considered disease of the ovum to be the most common cause. He included in diseases of the ovum, affections of those membranes which were formed by the uterus.

[The other points touched upon by Mr. Streeter are to be found in the abstract of his paper, published last week.]

MEDICO-BOTANICAL SOCIETY.

ARROW-ROOT, GENUINE AND IMPURE.—TEST FOR ASCERTAINING ITS QUALITY.—SKIN DISEASES.

Dr. SIGMOND, at the last meeting, stated that he was at present engaged in a series of experiments, with the view of determining the relative quantity of nutriment contained in arrow-root and other similar articles of diet. In the course of his observations he had been much struck with the great difference which existed between the specimens.

Mr. HUDSON said that it might not be unprofitable to the members to enter into a short account of the commercial part of the inquiry, with reference to arrow-root. Nothing in the market was so various in its qualities; common potato arrow-root might be procured for sixpence a pound, whilst the best West India kind would fetch almost any price. He had found the St. Vincent's arrow-root superior to all others. The mode of deciding the quality of arrow-root consisted in boiling a certain quantity of it in a certain quantity of water; it was then poured into a vessel and allowed to cool; it was then shelled out, and the best arrow-root would be found to retain its firmness and form longer than the other specimens. Arrow-root was much adulterated both in its manufacture and afterwards.

Dr. IFILL could state, with certainty, that all the arrow-root imported into this country from Barbadoes, was made from the maranta; indeed, the sweet potato of that island contained so little fecula that it would not be worth the while of the poor natives to substitute it for the maranta. The difference in the quality of the arrow-roots imported into this country, depended on the care which had been employed in the preparation. The greater number of times the fecula was washed, the purer would it be. It had been stated that the West India islands barely produced sufficient arrow-root for the inhabitants; this was altogether erroneous, as great quantities were sent to England.

Dr. SIGMOND inquired whether the natives of Barbadoes were subject to skin diseases from the constant use of arrow-root as an article of diet? He had been led to ask this question from having seen a suggestion which imputed the occurrence of herpes labialis, in people recovering from tedious illness, to the use of arrow-root.

Dr. IFILL believed that no such idea existed in Barbadoes.

A MEMBER stated that in Jamaica the skin diseases, which were there very prevalent among the natives, who seldom ate arrow-root, were attributed to the great quantity of salt which was used as an article of diet.

BRITISH MEDICAL ASSOCIATION.

Tuesday, January 21, 1840.

Dr. A. B. GRANVILLE, V.P., in the Chair.

A REPORT from the Finance Committee was read and adopted, with a resolution thereon relating to the prepayment of the first annual subscription by new members. It was also resolved, That the members of the Medical Reform Committee be requested to frame a report of their proceedings up to the present time, to be presented at the next meeting of Council.

A letter on the working of the New Poor-Law Bill, with respect to the medical department, from Mr. G. P. Heyward, of Egham, was read, and ordered to be referred to the Poor-Law Committee. A letter on Medical Reform was afterwards read from Dr. Martin Lynch, of Newcastle-on-Tyne.

Several matters of business having been arranged, the meeting adjourned to the 4th of February.

ST. BARTHOLOMEW'S HOSPITAL.

PHLEBITIS SUCCESSFULLY TREATED.

CASES of successful treatment of phlebitis are alike interesting and important.

Richard Miller, aged 22, spare habit, sallow complexion, habitually temperate, admitted on 18th June, labouring under œdematous erysipelas of the forearm, and

simple integumental inflammation of the upper arm on the right side. Expression anxious; skin hot and dry; pulse frequent and full; bowels constipated; with the other symptoms which usually attend fever.

Ten days before admission he was bled for a pain in his side; on the following day he felt well, and returned to work. The integument surrounding the wound became slightly inflamed and painful; but he continued heedless of it until he was obliged to confine himself to the house. His symptoms gradually increased until the ninth day, when he presented himself at the hospital.

Twenty-four leeches to the upper arm; the limb to be fomented; a cathartic of calomel and the comp. ext. colocynth.

19. The arm less painful, but no abatement in the swelling, although the parts were less tense no improvement in the general symptoms. For the first time complains of pain shooting from the site of the wound towards the axilla; his intelligence less acute, and his tongue beginning to incrust at the edges. The basilic vein could be felt indurated nearly throughout its whole extent.

20. Same state; the wound and parts in the immediate vicinity puffy; obscure fluctuation felt. A small incision made in the tumour, and one drachm of purulent matter evacuated. The probe could pass only upwards and downwards, in the direction of the vein, which led to the opinion that the matter had been evacuated from a venous abscess, strengthened by the fact, that on gently pressing the vein from above downwards, two drachms more tinged purulent matter escaped; and the vein, previously hard and tense, had now become comparatively soft and pliant. Pulse still rapid, but compressible; bowels inactive; tongue foul; thirst moderate; skin dry, but not parched.

A purgative enema immediately, and, every eighth hour a pill of 2½ grains of the chalk and mercury powder, and the same of Dover's powder. The effervescing draught according to the symptoms.

20. Constitutional symptoms improved; swelling and pain of arm abated; but he complained of pain below the short ribs on the left side, and acute pain in the left knee-joint. The pain of the side relieved by pressure, but that of the knee much aggravated by the slightest touch. The knee fomented. From this time he gradually improved. In a few days the mouth was slightly affected by the mercury, the limb regained its normal condition, and the patient, as regards general symptoms, was convalescent. The vein was contracted to the size of a violin string. The alterative omitted so soon as the mouth became affected, and some bitter infusion prescribed.

28. Quite convalescent; discharged with a recommendation to go into the country.

This case excited much interest, and it is important in several respects. On the evening of admission it differed in no way from the common erysipelas with œdema, for the patient complained of nothing which could lead us to consider this lesion as secondary. Our inquiries were directed towards the discovery of *phlebitis*, for considering the the wound made by the lancet as the immediate cause of the erysipelas, we thought that it might give rise likewise to inflammation of the vein, but the redness and swelling effectually prevented local examination. On the day succeeding admission, there was pain distinctly referred to the course of the vein, the tenseness was diminished, and the indurated vein could be felt. A tendency to typhoid fever also was manifest. A question arose as to the propriety of continuing the antiphlogistic treatment. All the benefit to be expected from depletion or other depressing means had been already conferred, and we doubted the power of such measures to arrest or modify the local disease. Existing signs warranted this opinion, for the violence of the disease was abated, and the force of the constitution was declining; and the following day confirmed it, for purulent matter had been already secreted, and was approaching the surface. We had to do, therefore, with the fever which had been awakened,—a fever which differs from the fever that accompanies pneumonia, pleurisy, and other simple acute inflammations, which is purely symptomatic, but is identical with that described by Broussais, as symptomatic of *gastro-enteritis*, or inflammation of the glandular and follicular tissue of the bowels, what, in this country, is denominated continued fever, little tolerant of depletive measures, and but slightly affected by treatment of the local affection, essentially an idiopathic fever, excited by a particular cause, of which cause it immediately becomes independent, occurring not because the gastro-intestinal mucous membrane *is* depraved, but because it *has been* depraved, erysipelas, phlebitis, &c., being merely exciting causes, acting on a system predisposed to fever, and waiting an opportunity to exhibit its predisposition.

Erysipelas may be the exciting cause of phlebitis. A middle-aged dissipated man received a wound on the hand; erysipelas ensued, which gradually extended up the arm to the side of the chest. He died. On dissection, the subcutaneous cellular tissue of the upper arm was affected, the limb was œdematous, the texture immediately surrounding the vein was infiltrated with purulent matter, the coats of the vein were thickened, the *vasa vasorum* were distinct, and the canal of the vessel was filled with purulent matter. We have reason to believe likewise that phlebitis is sometimes the result of burns. We have minutely ex-

which the abortion occurred. Unless the uterus was so small and so little dilatable that a large collection of blood could not take place in it, mechanical obstruction would be highly improper. He believed a bandage round the abdomen would not prevent the distension of the uterus with blood, unless it were so tight that it would injure some of the other viscera. Opium was very valuable from its power of sustaining the energy of the nervous system.

Mr. STREETER, in reply, said, that his interdiction of the use of opium, referred only to those cases in which the os uteri was dilated, and the ovum not yet expelled. It was useful before the pain and hæmorrhage, the essential symptoms, had set in. It was only in cases of early abortion that he considered disease of the ovum to be the most common cause. He included in diseases of the ovum, affections of those membranes which were formed by the uterus.

[The other points touched upon by Mr. Streeter are to be found in the abstract of his paper, published last week.]

MEDICO-BOTANICAL SOCIETY.

ARROW-ROOT, GENUINE AND IMPURE.—TEST FOR ASCERTAINING ITS QUALITY.—SKIN DISEASES.

Dr. SIGMOND, at the last meeting, stated that he was at present engaged in a series of experiments, with the view of determining the relative quantity of nutriment contained in arrow-root and other similar articles of diet. In the course of his observations he had been much struck with the great difference which existed between the specimens.

Mr. HUDSON said that it might not be unprofitable to the members to enter into a short account of the commercial part of the inquiry, with reference to arrow-root. Nothing in the market was so various in its qualities; common potato arrow-root might be procured for sixpence a pound, whilst the best West India kind would fetch almost any price. He had found the St. Vincent's arrow-root superior to all others. The mode of deciding the quality of arrow-root consisted in boiling a certain quantity of it in a certain quantity of water; it was then poured into a vessel and allowed to cool; it was then shelled out, and the best arrow-root would be found to retain its firmness and form longer than the other specimens. Arrow-root was much adulterated both in its manufacture and afterwards.

Dr. IFILL could state, with certainty, that all the arrow-root imported into this country ence in the quality of the arrow-roots imported into this country, depended on the care which had been employed in the preparation. The greater number of times the fecula was washed, the purer would it be. It had been stated that the West India islands barely produced sufficient arrow-root for the inhabitants; this was altogether erroneous, as great quantities were sent to England.

Dr. SIGMOND inquired whether the natives of Barbadoes were subject to skin diseases from the constant use of arrow-root as an article of diet? He had been led to ask this question from having seen a suggestion which imputed the occurrence of herpes labialis, in people recovering from tedious illness, to the use of arrow-root.

Dr. IFILL believed that no such idea existed in Barbadoes.

A MEMBER stated that in Jamaica the skin diseases, which were there very prevalent among the natives, who seldom ate arrow-root, were attributed to the great quantity of salt which was used as an article of diet.

BRITISH MEDICAL ASSOCIATION.

Tuesday, January 21, 1840.

Dr. A. B. GRANVILLE, V.P., in the Chair.

A REPORT from the Finance Committee was read and adopted, with a resolution thereon relating to the prepayment of the first annual subscription by new members. It was also resolved, That the members of the Medical Reform Committee be requested to frame a report of their proceedings up to the present time, to be presented at the next meeting of Council.

A letter on the working of the New Poor-Law Bill, with respect to the medical department, from Mr. G. P. Heyward, of Egham, was read, and ordered to be referred to the Poor-Law Committee. A letter on Medical Reform was afterwards read from Dr. Martin Lynch, of Newcastle-on-Tyne.

Several matters of business having been arranged, the meeting adjourned to the 4th of February.

ST. BARTHOLOMEW'S HOSPITAL.

PHLEBITIS SUCCESSFULLY TREATED.

CASES of successful treatment of phlebitis are alike interesting and important.

Richard Miller, aged 22, spare habit, sallow complexion, habitually temperate, admitted on 18th June, labouring under œdematous erysipelas of the forearm, and

[illegible] usually attend fever.

Ten days before admission he was bled for a pain in his side; on the following day he felt well, and returned to work. The integument surrounding the wound became slightly inflamed and painful; but he continued heedless of it until he was obliged to confine himself to the house. His symptoms gradually increased until the ninth day, when he presented himself at the hospital.

Twenty-four leeches to the upper arm; the limb to be fomented; a cathartic of calomel and the comp. ext. colocynth.

19. The arm less painful, but no abatement in the swelling, although the parts were less tense no improvement in the general symptoms. For the first time complains of pain shooting from the site of the wound towards the axilla; his intelligence less acute, and his tongue beginning to incrust at the edges. The basilic vein could be felt indurated nearly throughout its whole extent.

20. Same state; the wound and parts in the immediate vicinity puffy; obscure fluctuation felt. A small incision made in the tumour, and one drachm of purulent matter evacuated. The probe could pass only upwards and downwards, in the direction of the vein, which led to the opinion that the matter had been evacuated from a venous abscess, strengthened by the fact, that on gently pressing the vein from above downwards, two drachms more tinged purulent matter escaped; and the vein, previously hard and tense, had now become comparatively soft and pliant. Pulse still rapid, but compressible; bowels inactive; tongue foul; thirst moderate; skin dry, but not parched.

A purgative enema immediately, and, every eighth hour a pill of 2½ grains of the chalk and mercury powder, and the same of Dover's powder. The effervescing draught according to the symptoms.

20. Constitutional symptoms improved; swelling and pain of arm abated; but he complained of pain below the short ribs on the left side, and acute pain in the left knee-joint. The pain of the side relieved by pressure, but that of the knee much aggravated by the slightest touch. The knee fomented. From this time he gradually improved. In a few days the mouth was slightly affected by the mercury, the limb regained its normal condition, and the patient, as regards general symptoms, was convalescent. The vein was contracted to the size of a violin string. The alterative omitted so soon as the mouth became affected, and some bitter infusion prescribed.

28. Quite convalescent; discharged with a recommendation to go into the country.

[illegible] with erysipelas, for the patient complained of nothing which could lead us to consider this lesion as secondary. Our inquiries were directed towards the discovery of *phlebitis*, for considering the the wound made by the lancet as the immediate cause of the erysipelas, we thought that it might give rise likewise to inflammation of the vein, but the redness and swelling effectually prevented local examination. On the day succeeding admission, there was pain distinctly referred to the course of the vein, the tenseness was diminished, and the indurated vein could be felt. A tendency to typhoid fever also was manifest. A question arose as to the propriety of continuing the antiphlogistic treatment. All the benefit to be expected from depletion or other depressing means had been already conferred, and we doubted the power of such measures to arrest or modify the local disease. Existing signs warranted this opinion, for the violence of the disease was abated, and the *force* of the constitution was declining; and the following day confirmed it, for purulent matter had been already secreted, and was approaching the surface. We had to do, therefore, with the fever which had been awakened,—a fever which differs from the fever that accompanies pneumonia, pleurisy, and other simple acute inflammations, which is purely symptomatic, but is identical with that described by Broussais, as symptomatic of *gastro-enteritis*, or inflammation of the glandular and follicular tissue of the bowels, what, in this country, is denominated continued fever, little tolerant of depletive measures, and but slightly affected by treatment of the local affection, essentially an idiopathic fever, excited by a particular cause, of which cause it immediately becomes independent, occurring not because the gastro-intestinal mucous membrane is depraved, but because it *has been* depraved, erysipelas, phlebitis, &c., being merely exciting causes, acting on a system predisposed to fever, and waiting an opportunity to exhibit its predisposition.

Erysipelas may be the exciting cause of phlebitis. A middle-aged dissipated man received a wound on the [illegible] causes, which gradually extended up the arm to the side of the chest. He died. On dissection, the subcutaneous cellular tissue of the upper arm was affected, the limb was œdematous, the texture immediately surrounding the vein was infiltrated with purulent matter, the coats of the vein were thickened, the *vasa vasorum* were distinct, and the canal of the vessel was filled with purulent matter. We have reason to believe likewise that phlebitis is sometimes the result of burns. We have minutely ex-

amined the veins of subjects brought to the dissecting-room with marks of recent injury from fire. In these cases it was found that the plexus of veins at the bend of the arm, together with the main trunks, were affected in the manner above described. There are other reasons also for believing that burns sometimes prove fatal by inducing phlebitis. We have observed that burns by which the vitality of the skin is immediately destroyed, are, *cæteris paribus*, less fatal than those which excite such a degree of inflammation as, despite treatment, to advance to mortification or sloughing of that texture. The general symptoms in such cases are similar to those observed in phlebitis; the fever seldom demands decided antiphlogistic measures, but requires our being on the watch for the time when stimuli are necessary.

One fact in Miller's case enables us to ask whether the re-opening the wound in the vein, to discover and evacuate purulent matter, might not with advantage become more general. It involves no risk, and might frequently produce positive good.

With regard to the treatment of *phlebitis* in general, the practice pursued in the case of Miller seems to be worthy of imitation. It was adopted in his case, because we had frequently seen it successful in cases of erysipelas in which the constitution was similarly disturbed.—*Abs. fm. Paper by Dr. G. Bell, in Edin. Med. Jour.*, Jan., 1840.

ST. THOMAS'S HOSPITAL.

POISONING WITH ARSENIC.—POST-MORTEM APPEARANCES.

Sarah Emery, a stout florid person, between 20 and 30 years of age, was admitted about twelve at night, on the 17th of January last, under the care of Dr. Robert Williams. It was stated that she was a woman of the town, and, on account of some quarrel with a favourite paramour, about half-past six in the evening she had taken a pennyworth of white arsenic. She went out after this and took some gin, and, in the course of about two hours, was suffering from nausea, faintness, great thirst, considerable pain, and burning heat in the epigastric region, with heat and dryness of the fauces, and a constant sensation of desire to swallow saliva. She went to the druggist, or her friend went to him, and he gave her an emetic of antimonial wine. Vomiting came on; the pain increased; voice became very hoarse; and, on admission, the pulse was stated to be 130, and small. The stomach-pump was immediately used, and the stomach well washed out. A mixture of olive oil and mucilage of acacia was ordered to be taken in the intervals of vomiting, which began to recur about every hour. In the morning of the 18th there appeared no great change, except that there was more tenderness over the abdomen. Respiration was rather hurried; pulse 120, small; bowels not opened. Half an ounce of castor oil was given, and a sinapism applied over the abdomen. Draughts with carbonate of potash were also given, effervescing with citric acid.

In the evening, there being considerable distress from the vomiting, two minims of hydrocyanic acid were given every four hours in peppermint water, and barley water thickened with gum arabic for drink.

19. Vomiting relieved; tenderness over the abdomen more diffused, but less acute; respiration almost entirely carried on by the diaphragm and thoracic muscles; could not take a deep inspiration without pain; obscure crepitation at the lower parts of both lungs; pulse 130, contracted and very small; no derangement of the intellectual faculties; tongue red and dry at tip and edges, moister in the centre, and coated with a light fur; bowels open; evacuations fœtid and dark coloured; urine scanty. Ordered to continue the hydrocyanic acid, and apply a blister to the epigastrium.

20. Dr. Williams saw her for the first time. Pain, tenderness, and vomiting, less urgent, but the pulse was almost imperceptible; fluttering and irregular action of heart; tongue moister; thirst less; bowels open; and breathing more easy. Ordered to omit the hydrocyanic acid, and take a drachm of syrup of white poppies in mucilage of gum arabic every four hours.

21. No great change was observed in the middle of the day; but towards night the extremeties became cold, surface of body covered with clammy sweat, face livid, and countenance anxious. There was some irritation about the urinary organs, and a good deal at the anus. Action of heart became irregular, breathing difficult, pulse imperceptible, and she died next morning.

The matter which was brought away by the stomach-pump was analysed by Mr. Leeson, who stated that it contained arsenic. It appeared afterwards, however, that owing to some imperfection in the apparatus employed, there was some doubt on the subject.

An examination of the body was made about eight hours after death. It was very fat, and still warm, and, on being opened, exhaled a most peculiarly offensive and sickening odour.

Head.—Small quantity of serum in cavity of arachnoid. Some congestion of the vessels of the pia mater and effusion into its cells; substance of cerebrum and cerebellum healthy.

Thorax.—Heart natural size; healthy, with exception of slight induration of mitral valves. No fluid in pericardium. The lungs were heavy and dark-coloured, and on a section being made, presented an appear-

ance rather peculiar, the cut surface appearing bright red, glossy, and smooth; it resembled neither the granular appearance of pneumonic hepatization, nor the defined homogeneous structure of the clot in pulmonary apoplexy. It was, perhaps, the first stage of pneumonia, the appearance being produced by extensive engorgement or congestion of the pulmonary capillaries, no effusion having as yet taken place. It was evidently no post-mortem change, from the fresh state of the body, and as the change in the lung was uniform, or nearly so. The shape of the lower lobe of the left lung was altered, the surface being rendered irregular from the contraction of a large cicatrix in the substance of the lobe. The mucous membrane of the larynx and trachea was intensely red.

Abdomen.—Stomach appeared distended, and of a white colour. It contained nearly a pint of dirty greenish matter. Mucous membrane somewhat softened, separating a little more readily than usual from the other coats. There was a good deal of dark-coloured vascular arborescence, principally confined to the lesser curvature. A small patch of ulceration near the cardiac extremity covered by some extravasated blood. The mucous membrane of the great curvature was raised, for a considerable extent, by the presence of air in the sub-mucous tissue. The small intestines contained a good deal of fœculent matter. Their mucous membrane throughout was unusually vascular, and covered in places by a viscid mucus. There were evidences both of former and recent peritonitis, in some slight effusion and vascularity, and in old adhesions. Liver was enlarged, and presented a very singular and uniform structural change. It was softened, and rendered of a yellow-fatty colour throughout its whole extent; it did not resemble, however, fatty degeneration; it was more like the cortical substance of the kidney in an advanced stage of Bright's disease. Both kidneys were diseased. The cortical substance thickened and very pale. On tearing off the peritoneal coat, the surface appeared granular and softened. Spleen and pancreas healthy. A large number of serous cysts in one of the Fallopian tubes.

SCIENTIFIC REWARDS.

Gold medals, of the value of 1,500 francs each, have been awarded by the Royal Academy of Medicine to Drs. Bright, Martin, Solon, and Rayer, for their labours on disease of the kidney; a medal, of equal value, to M. Ricord, for his work on the venereal disease; and the sum of 1,000 francs to M. Martin for improvements in the mechanism of artificial legs.—*Gaz. Med. de Paris*, No. 1, 1840.

PETITION FOR MEDICAL REFORM

ADOPTED BY THE

BRITISH MEDICAL ASSOCIATION.

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the British Medical Association, adopted at the Anniversary Meeting of that Body, and signed on their behalf by the President and Council,

Humbly sheweth,

That your Petitioners are a large body of legally-qualified medical practitioners, either graduates of the Universities, or fellows, members, or licentiates, of the several existing medical Colleges and Corporations of the United Kingdom, who have associated themselves for the purpose of considering the various questions affecting the public health, and the rights, privileges, and respectability of their profession:

That your Petitioners, during the last three years, have devoted much time and attention, and have collected considerable information, and many facts in connection with these important matters, for which the nature and extent of their Association is well adapted, consisting, as it does, of a large number of the Profession in the metropolis, with Branch Associations, or members, in most parts of the British Empire:

That your Petitioners have also opened communications, and carried on an extensive correspondence, with similarly constituted Associations in England, Scotland, and Ireland:

That your Petitioners have, on several occasions, been before your Honourable House, on matters connected with Medical Policy:

That in 1837, they presented a Petition, fully setting forth the dangers to the Public, and the grievances which affected their Profession, from the present defective system of Medical Government and Education:

That in 1838, a Deputation from your Petitioners had an interview, on the same subject, with the Right Honourable Lord John Russell, the then Secretary of State for the Home Department, who seemed deeply interested by the statements made to him, and expressed himself favourable to the redress of the grievances, and the reform of the abuses which were brought under his notice by your Petitioners:

That in the same year, six of your Petitioners were examined before a Select Committee of your Honourable House, on the subject of Medical Relief to the Poor, and they have reason to believe, that chiefly through their representations, certain in-

justices done to the Medical Profession, and injuries inflicted upon the Poor, the consequences of the neglect of the several Medical Corporate Bodies to afford proper information to the Commissioners, were removed:

That your Petitioners have long beheld, with deep regret, the many serious evils to the public health and to the Profession which have arisen from the anomalous and imperfect state of Medical Education and Government;—that these are, in the opinion of your Petitioners, the natural consequences of the deplorable system of self-election and complete irresponsibility which prevails in the Colleges and Corporations:

That as these evils continue unabated, your Petitioners again approach your Honourable House to state, that they have for several years past been anxiously expecting the adoption of some measure of Medical Reform, founded on the mass of valuable evidence collected in 1834, with much industry and care, by a Committee of your Honourable House; at the same time your Petitioners are not ignorant that the subject is beset by many difficulties:

That however well the existing Corporations may have been adapted to the times and circumstances from which many of them date their origin, they are utterly inconsistent with the progress of science, and inadequate to the wants and intelligence of the public in the present day: That from the defective constitution of the Licensing Bodies, none of them possess the power of conferring the right to practise in every part of the Empire, however highly qualified the candidates may be; while there is no legislative enactment to prevent the most ignorant pretender or empiric from practising all or any of the departments of medicine in any part of her Majesty's dominions:

That it is the opinion of your Petitioners, founded upon reflection and experience, that Medicine and Surgery, now exercised as distinct branches of the profession in this country, constitute, in reality, but *one science*, and that, therefore, the existence of 18 or 19 licensing and graduating bodies in the United Kingdom, differing widely from each other in their requirements of qualifications from candidates, as well as in their power of conferring titles and licenses to practise, (a state of things unknown in any other civilised country in the world), must be, and is found to act most injuriously to the best interests of the Public, and only serves to create jealousies and dissensions among the members of the profession:

That the obvious as well as the most effectual remedy for all the evils alluded to by your Petitioners, would be, the establishment of a single representative Corporation or Faculty of Medicine for the general government of the profession, and the admission to the privileges of practising in the British dominions as the result only of an efficient education and practical examinations:

Your Petitioners, therefore, earnestly implore your Honourable House to take this important question into your most serious consideration, and to direct that a Bill may be passed as speedily as possible for the consolidation of the Medical Profession into One Faculty, having full power to regulate the examination and government of the whole body, and to confer equal rights and privileges upon all its members:

And your Petitioners, &c.

THE GOVERNORS OF ST. GEORGE'S HOSPITAL.

To the Editor of THE LANCET.

SIR:—With your observations laudatory of Sir B. Brodie on his retirement from the office of Surgeon to St. George's Hospital I entirely concur. You seem not, however, to be aware, that the honourable Baronet has not retired wholly from that Institution. The teachers of Sir Benjamin's Anatomical School in Kinnerton-street,* and also those of the Medical School of the Hospital, were aware that the withdrawal of his illustrious name would seriously impair the interests of the two schools in question. At the Weekly Board on Wednesday last, Sir B. Brodie gave notice, that it was his intention to continue his clinical lectures, and also during the succeeding winters to give to the pupils of the hospital gratuitous lectures on the more important branches of surgery.

Sir Benjamin retires to make way for his relative Mr. Tatum, and thus magnanimously relinquishes his emoluments (no trifling matter) as surgeon.† Having thus briefly disposed of this part of my subject, I come to that which is my principal object,

---

* This school was built by Sir B. Brodie at the cost to the Hon. Bart., *on dit*, of 7,500*l*. The object being, it was rumoured, to destroy the Anatomical School of Mr. Lane adjoining St. George's Hospital; because that gentleman had the audacity to become a candidate for the office of assistant-surgeon in opposition to Mr. Cutler, the nominee and assistant of Sir B. Brodie.

† The surgeons of St. George's Hospital receive each from the pupils between 600*l*. and 700*l*. per annum for the privilege of "walking" the hospital; the physicians each 400*l*. Superadded to this, two of the physicians, and two of the surgeons give medical and surgical lectures, the fees for which amount to a large sum. Some short time since, in the annual report of the charity, it was stated that the medical officers performed their duties at the hospital gratuitously!!!

to refute your libel on governors of hospitals, I mean, governors independent of the medical staff. You say, in the leading article of the last LANCET, "The governors of hospitals are like mere children in these matters; it is seldom, indeed, that they display such a degree of knowledge and energy, as is demanded for the proper management of an hospital." Now, Sir, I will show you how the governing body of St. George's Hospital is constituted.

All the medical officers are governors. There are four physicians, one assistant-physician, four surgeons, and two assistant-surgeons; to these are added four visiting apothecaries, appendages to the hospital utterly useless, except to swell the medical majority. We well know that apothecaries are in a great measure dependant on the leading physicians and surgeons for the sale of their juleps and catholicons. They are bound hand and foot to the chariot wheels of the Chambers and the Brodies of the day. Then there are the three teachers at Sir Benjamin's Anatomical School, and the lecturer on midwifery; thus, you will perceive, the medical staff consists of a compact band of 19 persons, all governors, who, with the exception of Dr. Wilson, uniformly vote with and support the medical dominancy. Superadded to this, there are a host of young men, who, having completed their studies, become governors, waiters on Providence, who are looking out for God-sends in the shape of vacancies at the hospital, or at other institutions; they know right well that their only chance of success or advancement depends on their subserviency to the powers that be. These are the "children," these are the "governors," who "seldom display that knowledge and energy which is demanded for the proper management of an hospital." Is it to be wondered at, that with a governing body so constituted all the efforts of men, independent of the medical clique, are utterly powerless? Many persons, anxious to promote the interests of St. George's Hospital, have given their time and attention at the Weekly Board, but if any wight dares to call in question the proceedings of the "children" he is bullied, and accused of factious motives, and ultimately retires in disgust. It is absurd to talk of the *governors* of hospitals. The *medical officers*, who are the servants of the institution, and ought to be the *governed*, are the *governors*. Hence, if a complaint is made of neglect or inattention to their patients, the inquiry is quashed, or a committee appointed, the majority of which is from the body I have described, and all investigation rendered nugatory. In the annual account of the proceedings of the *governors* of St. George's Hospital I find this Rule, "*That no person receiving salary, fee, or reward, is capable of being a governor.*" Yet, in contravention of this rule, I have shown, that the medical officers receive large fees and rewards, but they are *governors*. In *them* is vested not only the government of the hospital, but the appointment of officers. No candidate, however talented, has the least chance of success unless related to some of the staff, or unless, by a long course of glozing, flattery, and subserviency, he has won golden opinions of the physicians and surgeons. If John Hunter were to rise from his grave, and become a candidate for the vacant office of assistant-surgeon, he would not be elected.

You are laudably engaged in promoting medical reform. May success attend your efforts. More especially direct your attention to public hospitals. They are Augean stables. The public will applaud your exertions, and the suffering poor be immeasurably benefitted. I am, Sir, your obedient servant,

A GOVERNOR OF ST. GEORGE'S HOSPITAL.
Jan. 20th, 1840.

ARABIC MODE OF TREATING THE VENEREAL DISEASE.

THIS mode of treatment was communicated more than 150 years ago to the medical officers of the Marseilles' Hospital, by a Spanish apothecary, and is still employed there in all cases of virulent syphilis which resist the ordinary methods. The Arabic mode consists in the use of pills, of an opiate, sudorific drinks, and a peculiar regimen, called the *dry diet*. The pills are thus composed:—

Metallic mercury, Deuto-chloride of mercury, of each, ℈ 3;
Senna, Agaric, Root of Pyrethrum, of each, one 3;
Honey, q. s.

The vegetable substances are reduced to powder; the metallic mercury is carefully rubbed up with the deuto-chloride, until the globules have completely disappeared, and the honey is then added, to make a mass, which is divided into six-grain pills. Two are given daily. The opiate is thus composed:—

Sarsaparilla, 5 ounces;
Squine, 3 ounces;
Roasted nut-shells, 1 ounce;
Allspice, 1 drachm;
Honey, q. s.

Two to four drachms are given night and morning.

The sudorific drink is made with sarsaparilla and squine. The patient is not allowed to touch any other fluid, but takes one or two quarts of this in the 24 hours. The diet is truly a *dry* one. Biscuits, raisins, nuts, dried figs, and roasted almonds; no other food is allowed. The following order is prescribed for the administration of the remedies: a pill every morning, with

a glass of the tisan; an hour afterwards, the opiate with another glass; in the evening the same routine.

The duration of this treatment varies from 30 to 50 days. The enormous quantity (36 grains) of corrosive sublimate contained in the pills might render us apprehensive of some accidents, if we were not aware that its properties were destroyed by being rubbed up with the metallic mercury. It has never been known to produce any unpleasant effects. However extraordinary this mode of treatment may appear to be, M. Payen, whose account of it we transcribe, assures us that it is regarded, at the Marseilles' Hospital as the most sure and efficacious in all cases where the constitution is deeply affected: whenever ill-conditional ulcers exist in the throat, with caries of the bones, &c.; and particularly whenever the ordinary treatment of syphilis has failed. M. Payen relates three remarkable cases of constitutional lues which were cured by the Arabic method, after every other mode had been tried without success.—*L'Experience*, No. 129, 1839.

VACCINATION AND RE-VACCINATION.

In a Memoir recently published by Professor Otto, of Copenhagen, we find the following remarks on Vaccination, which completely coincide with the views not long since developed in THE LANCET :—

Copenhagen is extremely subject to epidemic diseases, and, during the last few years, to small-pox. From the various observations which he has made during these epidemic attacks, Professor Otto concludes, 1. That the vaccine virus has lost nothing of its original force. 2. That a child cannot be vaccinated too soon after birth. 3. That the protective influence of the vaccine virus gradually diminishes with time, in some, perhaps in the greater part of those vaccinated, it is lost after a certain lapse of years. 4. The nature of the cicatrix does not enable us to determine how far the disease will be modified. 5. Small-pox, when it occurs in the vaccinated, is always modified, and the more so, the younger the person is. 6. Regular variola, in the vaccinated, only appeared in persons who had passed the age of fourteen. 7. Out of ten vaccinated persons who died, none had passed the age of twenty-three. 8. Not a single case of small-pox had, as yet, occurred in the re-vaccinated.—*Rust's Mag., and L'Experience*, No. 128, 1839.

We recommend the above conclusions of their correspondent to the attention of the Committee of the "Provincial Medical and Surgical."

THERAPEUTICAL ACTION OF PRUSSIC ACID.

In our last Number we related the results of some experiments, which have recently been made in the French hospitals with Prussic acid. The following contains a summary of M. Bequerel's researches:—

In diseases of the heart the use of Prussic acid was more injurious than useful, as it sometimes increased the distressing symptoms.

The anhydrous acid, prepared after the manner of Gea-Pessina, is the only one which should be employed medicinally: it keeps for a long time without being altered, and its action is uniform.

It should be given in a mixture of four ounces of water without sugar, and by spoonfuls. Uniformity in the strength of the doses is thus obtained.

When given in the dose of from 8 to 12 drops this acid acts locally, and with intermissions; but when carried to 16 or 20 drops, and continued for a certain time, its action is general and not intermittent: it is essentially hyposthenic.

In larger doses than those just mentioned Prussic acid is apt to occasion certain accidents, the chief symptoms of which consist in a violent excitement of the nervous and circulating systems.

It has no influence on the progress or symptoms of any disease; but in some nervous affections it may change the progress, intensity, and nature of the symptoms, without bringing about a complete cure.— *Gaz. Med. de Paris*, Jan. 13, 1840.

WATERY SOLUTION OF OPIUM IN VENEREAL EXCRESCENSES.

M. Venot, of the Venereal Hospital, Bourdeaux, having been disappointed in the various remedies which he had employed for the treatment of venereal vegetations, determined to try the efficacy of the narcotic lotions, recommended by M. Desruelles. His experiments were most successful, and from them he draws the following conclusions:—

1. The solution of opium should be fresh and concentrated, an ounce of water containing at least one drachm and a half of opium.

2. The white dry epidermoid vegetations do not yield so readily.

3. All cases of mucous vegetations, moist warts, condylomata, &c., are almost certainly cured by the watery extract of opium, especially if employed after general treatment.

4. The local action of the remedy is manifested in the following manner:—the vegetations dry up, become pale, then yellow, brown, and finally waste away.

5. This action, which is evidently poisonous, may extend to the healthy parts and determine certain accidents, against which the physician must be on his guard.—*Ibid. l.c.*

CHLORIDE OF SODIUM IN SCROFULA.

M. A. Latour speaks highly of the utility of this remedy in scrofula or pulmonary consumption. The following case is illustrative of its effects:—

A girl, 13 years of age, of lymphatic temperament, suffered, for more than a year, under scrofulous symptoms; the sub-maxillary ganglia were greatly enlarged, and the upper lip was the seat of an extensive scrofulous ulceration, for which a variety of remedies had been tried during eleven months without benefit.

On the 9th of April a drachm of sea-salt was given in soup, and ordered to be continued daily. The sore was washed with salt-water, and the diet was confined entirely to animal food. The re-action produced by the salt was so great that the dose was diminished by one half, and then continued at that dose. The child took frequent exercise in the open air. Towards the middle of May the ulcer was healed, and in fifty days a complete cure was obtained. M. Latour recommends that the salt should be given in flour, made up in the form of a little French roll.

Thus a drachm of salt, dissolved in a small quantity of water, may be mixed with four ounces of flour. Children will readily eat one or two of these rolls in the day.—*L'Experience*, Jan. 9, 1840.

STATISTICAL RESEARCHES ON PNEUMONIA.

M. Pelletan, *chef de clinique* of M. Bouillaud, has carefully analysed 75 cases of pneumonia which he observed in the hospital of La Charité during the years 1834, 1835, and 1836. The following deductions may be drawn from these cases:—

Single pneumonia (i. e. affecting one side of the chest only) is more frequent than double pneumonia, in the proportion of 7 to 2. In the 75 cases the right lung was more frequently attacked than the left one, in the proportion of 2½ to 1. The base of the lung was more frequently attacked than the apex, in the proportion of 3 to 2. Men were more frequently attacked than women, in the proportion of 10 to 1. The influence of exposure to cold, as an exciting cause, was found to exist in 7-9th's of the cases. The frequency of the pulse gave no exact indication of the progress of the disease; on the contrary, the frequency of the respiration seemed to measure exactly the degree and danger of the malady.

Prostration of strength and delirium more frequently existed with pneumonia of the apex, than of the base. As for the treatment the greatest benefit was derived from bleeding *coup sur coup*. Only two deaths occurred in 55 cases of simple pneumonia, and the duration of the disease was manifestly abridged. Blisters were of little service in adults; sometimes useful in children, but of very great benefit in old people. —*Gaz. Med.* Jan. 11, 1840.

NEW JOURNAL.

M. Jules Guerin, the talented editor of the French "Medical Gazette," is about to establish a journal, to be specially dedicated to deformities. M. Guerin has been recently added to the staff of the Childrens' Hospital, where he delivers a series of clinical lectures on deformities of the osseous and muscular systems.

An anonymous correspondent has forwarded to us some printed documents from Edinburgh, in eulogy of Dr. E. KENNEDY, as a Teacher of Midwifery. The election for the Professorship of Midwifery takes place on Tuesday next. We learn that Mr. J. Y. SIMPSON is likely to receive a majority of the suffrages of the electors.

The Petition of the BRITISH MEDICAL ASSOCIATION on Parliamentary Reform, having recently appeared in our columns, before its revision, we this week give a correct copy of that document, at page 707.

TO CORRESPONDENTS.

To several Dublin Correspondents we must reply, generally, that we are perfectly conversant with the medical affairs and politics of that capital, and will afford the parties to whom this fact may not be particularly interesting an early opportunity of being assured that their anti-reform intrigues and proceedings are well understood in London. By-the-by, we find the Editors of the "Dublin Medical Press" announcing, that they have received "a distinct, undisguised, and unequivocal intimation, both verbally and in writing, that if they continue their exertions in favour of Medical Reform, or persevere in the exposure of abuses, effectual means will be resorted to, either to deprive them of their Professorships, or break up the School of the College of Surgeons." The Editors add, that they treat this attempt at coercion "with the contempt it deserves" and "set at defiance the power, if it exist, proposed to be exercised." The intimation must be anonymous, or the "writing" would surely be published. Under either circumstance, the threat is not unlike a hoax, so powerless for evil, however annoying they may be, are the opponents of reform in the Irish capital.

Querist.—He is not "liable to an action," but his neighbours, being professional men, will look pretty sharp after his professional misdeeds and misdemeanors. An M.R.C.S. must also be a L.A.C. if he wishes to practise medicine, generally, with impunity as regards the law.

Justitia.—The Coroner should have held an inquest on the body of the female who died in childbed at C——, in last January. The simple fact that the unfortunate woman was attended by an unqualified practitioner should have been quite sufficient to arouse his suspicion and justify his interference. The next victim to the quack may excite in the Coroner an impression that judicial inquiry may prevent a *third* death, as an inquest on the first victim might have prevented the second. The law is quite clear regarding what deaths demand an inquest.

A "gentleman," we are informed, is "in town from America," who has "performed some cures, so wonderful," that he will astonish the profession with the reports. "He some time since, at one of our hospitals," says our informant, "unlocked a young girl's jaw, in less than a minute, in the presence of about fifty doctors." Could he unlock the young girl's jaw in Conduit-street, late of University College Hospital, he might publish her singular confessions under the head of "Mesmeric Impositions."

M. B. (Dublin).—If the letter of Mr. Cory relates to a proper subject for inquiry, and treats the matter with reason; with the actual motive for publication the world has no business. We have not seen the letter.

F. M. (Wigan.)—We await the decision at the Sessions, before the Recorder.

The communications of *Mr. Hiley* and *Mr. Renwick* shall be inserted.

At an early opportunity we will examine the Essay from Lyme Regis. The hand writing is too peculiar for speedy perusal.

We again request the name and address of the correspondent whose letter is headed, "Character of the Examinations," &c.

M. B. may as well attach his name to his letter on gonorrhœa; or send it privately, as a voucher for the statements. It will cost but a penny.

M.R.C.S.L. and *A Medical Student* (Dublin) at a convenient opportunity for notice.

Those who desire to know what the Poor-Law Commissioners themselves think of the diet which is apportioned to robust men in the workhouses, may obtain information on that head by the following extract from an advertisement headed "Chard Union.—Nurse Wanted," &c., recently forwarded to our office by a Devonshire correspondent:—"Salary £12 per annum, together with fire, candles, washing, lodging, *and one and a half ration* of such provisions as the house affords to able-bodied paupers."

Homo.—It is more usual to go to a surgeon. The nearest respectable practitioner in his own neighbourhood is as likely to treat the complaint properly, as one, a mile distant, with a special reputation.

The medical students at some of the metropolitan schools complain that although themselves not "over-fastidious," decency of language is too often abandoned in the lecture-room, by certain of the teachers, with vicious effect on the minds of the juniors pupils, especially. Conventional phrases selected from the most vulgar sources, bearing the same relation to wit as flash notes to the precious metals, are abundantly used by them, also. This notice of the habit may help to produce a cure.

The letter of *Mr. Corfe* on the process by which the various preparations of the kidney which were sent to all the public museums of the London hospitals, are to be made, shall be published at the earliest opportunity.

The letter of *Mr. Lambton* is designed for insertion. That of Mr. Gray shall be noticed next week.

An Apothecary (Kensington) has not studied medical law, or he would have known that Mr. White, Mr. Callaway, or any member of the Council of the College of Surgeons, can "attend cases of phthisis," "inflammation of the membranes of the brain in infants," or other so-called "medical cases," prescribe for them, and take a fee, without rendering themselves liable to pay penalties under a prosecution by the Apothecaries' Company. To do the things specifically named, is not to act "as an apothecary" according to law.

We cannot exactly attend to the request of Mr. Carter, but as our account must be an abstract of the fuller statement, any such mistakes as he suggests will not appear, we believe.

Received, Mr. Redman's letter, and the Report of the York Pauper-Lunatic Asylum.

Dr. Taylor, of Kingston, remarks that the observations on the peculiar colour of the gums in cases of lead colic, are not new. His brief remarks on the subject shall appear next week.

The letter of *Mr. Morrison*, Lecturer on Anatomy at Newcastle-on-Tyne, on the Anatomy Act, and the ridiculous interpretations which some writers give to the clauses relating to the inspector, shall appear, possibly with some editorial comments on the subject, in an early Number.

The letters of *Mr. Fenner and Mr. Gray, and Dr. Smith*, have been received.

NEW FORM OF INKSTAND.—Since journalism requires as incessant resort to penmen's ink as to printer's ink, Messrs. Perry, of Red Lion-square, have forwarded to us a curious vehicle for that essential and important fluid, under the name of a "Filter Inkstand,"—a glass ink-box, of convenient size, containing a miniature air-pump, by means of which, without any trouble, coarse ink is instantly filtered from the dreg that clogs the pen when ink has stood long enough to "settle,"—at once a useful article and a pretty toy for the writing table. The purpose of the ingenious inventor appears to be fully accomplished in his production, the merits of which we willingly announce.